# GOVERNMENT POLYTECHNIC NASHIK

(AN AUTONOMOUS INSTITUTE OF GOVT. OF MAHARASHTRA)

## CURRICULUM - 2011

## DIPLOAMA PROGRAMME

IN

## INTERIOR DESIGN AND DECORATION

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# Preface

Government Polytechnic, Nashik is established in 1980. The institute has been conferred an academic autonomous status in 1995 by Government of Maharashtra because of excellent performance.

The vision of the institute is to develop world class pragmatic engineers. For this the institute aims to provide students technical education training and guidance that lead to personality development, meaningful employment and entrepreneurship and to develop and maintained Center of Excellence for education of new emerging trends in information technology. To achieve this continuous efforts are made to design the curriculum considering the latest development in the industrial sector and technology.

The two year Diploma Programme in Interior Design and Decoration is being offered from 2008 under academic autonomy. The curriculum revision is a regular activity and system approach is followed for designing the curriculum. The curriculum has been revised and the implementation has started from the academic year 2011-12. The revised curriculum is designated as "Curriculum 2011".

For designing the curriculum, the questionnaire has been designed to get the feedback from different stake holders i.e. industries, teachers and students. The feedback from different stake holders has been analysed in search conference and the programme structure is finalised and approved by Programme Wise Committee (PWC), Board of Studies (BOS) and Governing Body (GB).

The content detailing of individual course has been carried out by Group of Experts, consisting of faculty from this institute as well as from other nearby institute and industrial experts. The content detailing was presented before the PWC, BOS and GB for approval.

In this curriculum-2011, the students has to acquire 135 credits for successful completion of Diploma Programme.

The courses of curriculum are structured at different 5 levels i.e. Foundation Courses, Basic Technology Courses, Allied Courses, Applied Technology Courses, Diversified Courses. In addition to these 5 levels, for overall development of the students "Non Examination Credit Courses" are also included.

The minimum entry level is $10^{th}$. However, the curriculum provides "Multi Point Entry and Credit system (MPEC)" for the students opting admission after passing $12^{th}$, ITI, MCVC. In this, the students will get exemptions in certain courses as per the rules.

There is a flexibility for opting the courses as per the choice of students.

The curriculum provides "Sample Path" as a guide line for selection of courses in each term for entry level as $10^{th}$.

The List of Courses for Award of Class after completion of Diploma Programme is prescribed separately in this curriculum.

The fulfilment of objectives of curriculum-2011 will depend on its effective implementation. The teachers who are implementing the curriculum were also involved in design process; hence, I hope that the curriculum-2011 will be implemented in effective way.

(Dr. D. R. Nandanwar)
Principal
Government Polytechnic, Nashik

## Diploma Programme in Interior Design and Decoration

## Rationale:

This programme is concerned with the planning, design and organisation of interior architectural space. It offers diploma technician, the opportunity to explore the interaction between users and their physical environments by considering social and cultural values, norms, tastes and expectations. In addition, it provides them with a wide range of technical skills in construction technology and materials, environmental engineering, structural design, 3D design and virtual design, including teamwork and communication skills. It involves the rehabilitation and refurbishment of existing buildings, and the creation of new spaces.

It provides knowledge and understanding of the interior design process from inception to completion. This includes planning and scheduling of design tasks, production of construction documents and specifications. At the core of the required course work are design studios, where students gain practical experience of programming and designing interior spaces. Support courses to complement and enhance the core elements include technology and structures, furniture, materials and finishes, colours, lighting, HVAC systems, plumbing, acoustics, and virtual reality and CAD.

**Programme Objectives:**

The objectives of diploma programme in Interior Design and Decoration will enable student to

1. Become entrepreneur and work freelance (self-employed), by offering consultancy services directly to individual clients.
2. Investigate other opportunities for employment including the followings
    a. Design show-homes for builders & property developers
    b. Advise clientele & providing shopping services in specialised furniture and furnishings stores
    c. Work with kitchen and bathroom manufacturers to help clients plan their space effectively.
    d. Larger interior design and architectural practices may also hire to work alongside more senior personnel
    e. In addition to qualification, develop one of the best tools to impress potential clients and/or employers, which is a strong portfolio.

**Job Profile of Interior Design and Decoration Technician:**

A diploma technician in Interior Design and Decoration has to carry out various activities in various areas during his implementation of engineering knowledge.

Diploma Interior Design and Decoration technician has to perform following duties:

1. Sound skilled interior architectural designer.
2. Development of interest in research in the theory and applications of interior design in the context of the built environment.
3. Development of an ability to apply interior design methods within a multi-disciplinary environment.
4. Apply a variety of tools and techniques to communicate interior design issues effectively.
5. Develop a professional expertise to operate in a rapidly changing environment.
6. Develop inter-personal skills by relating to and working with others.
7. Apply research techniques when undertaking a thorough investigation into a relevant aspect of the interior architectural design process.
8. Demonstrate professional skills in the planning, design and delivery of interior design projects.
9. Show sufficient knowledge and understanding of the technological, managerial and design requirements to achieve successful completion of interior design projects.
10. Articulate sound views and approaches, and evaluate their impact on the interior designer's profession.
11. Apply a variety of tools and techniques to understand and communicate interior design issues effectively.
12. Develop inter-personal skills by relating to and working with others.

**Skills to be developed:**

The curriculum aims at developing skills so that the diploma pass outs would be suitable for industry.

The skills are listed below

- Communication ability
- Presentation skills
- Observation skills
- Read and interpret building plans, Structural drawing and interior design drawing
- Understand concepts and principles related to Interior Design and Decoration
- Supervision and execution of Interior sites works.
- Analyse and interpret test results for interior materials.
- Taking various types of measurement for valuation.
- Draw interior plans manually and by using CAD & 3d Max.
- Give layout of software
- Calculate quantities of interior work and prepare estimates.
- Understand procedure of tender notice and contract agreement.
- Use computer softwares.
- Use standard Professional ethics.
- Planning and organization of interior & construction activities.
- Quality control techniques in Interior Design and Decoration.
- Prepare working drawing for interior work and details.
- Work as a member of a team and as leader.
- Write report for given task / project.
- Understand the treatment required for interior materials.
- Apply principles of Design in Interior Design and Decoration.
- Know the use of equipments and machinery in interior fields.

# PROGRAMME STRUCTURE

## PROGRAMME- DIPLOMA IN INTERIOR DESIGN AND DECORATION
## CURRICULUM STRUCTURE

## SCHEME AT A GLANCE

| Level | Name of Level | Total Number of Courses offered | Number of Courses to be completed | TH | TU | PR | Total Credits | Marks |
|---|---|---|---|---|---|---|---|---|
| Level-1 | Foundation Courses | 05 | 05 Compulsory | 12 | -- | 16 | 28 | 450 |
| Level-2 | Basic Technology Courses | 06 | 06 Compulsory | 11 | 01 | 22 | 34 | 600 |
| Level-3 | Allied courses | 03 | 03 Compulsory | 11 | -- | 02 | 13 | 300 |
| Level-4 | Applied Technology Courses | 04 | 04 Compulsory | 07 | -- | 24 | 31 | 550 |
| Level-5 | Diversified Courses | 05 | 02 Compulsory<br>01 Elective | 05 | -- | 20 | 25 | 600 |
| **Total** | | **23** | **20 Compulsory +1 Electives ---- 21** | **46** | **01** | **84** | **131** | **2500** |
| Non Examination Credit Courses | | 14 | 02 Electives | -- | -- | 04 | 04 | -- |
| **Grand Total** | | **37** | **23** | **46** | **01** | **88** | **135** | **2500** |

**Abbreviations:**

TH: Theory, TU: Tutorial, PR: Practical.

**PROGRAMME- DIPLOMA IN INTERIOR DESIGN AND DECORATION**
**PROGRAMME STRUCTURE**
**LEVEL – 1**
**FOUNDATION COURSES**

| Sr. No | Course Code | Course Title | PRQ | TEACHING SCHEME | | | | EXAMINATION SCHEME | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | TH | TU | PR | Total Credits | Theory Paper | | Test | PR | OR | TW | Total |
| | | | | | | | | Hrs | Marks | | | | | |
| 01 | 1110 | Computer Applications | -- | -- | -- | 2 | 2 | -- | -- | -- | -- | -- | 50 | 50 |
| 02 | 1125 | Basic design. | -- | 4 | -- | 6 | 10 | 3 | 80 | 20 | -- | 25 | 25 | 150 |
| 03 | 1126 | Basic Materials and Products. | -- | 4 | -- | -- | 4 | 3 | 80 | 20 | -- | -- | -- | 100 |
| 04 | 1127 | Paraline Projection | -- | 2 | -- | 6 | 8 | -- | -- | -- | -- | -- | 100 | 100 |
| 05 | 1128 | Communication Techniques & Life skills | -- | 2 | -- | 2 | 4 | -- | -- | -- | -- | -- | 50 | 50 |
| **Total** | | | **--** | **12** | **--** | **16** | **28** | -- | **160** | **40** | **--** | **25** | **225** | **450** |

**Level : 1**
Total Courses : 05
Total Credits : 28
Total Marks : 450

**Abbreviations:**
PRQ: Prerequisite, TH: Theory, TU: Tutorial, PR: Practical, OR: Oral, TW: Term Work

**Course code Indication:**
First digit : Indicates Year of Revision
Second digit : Indicates Level.
Third & Fourth digit : Indicates Course Number.

**Assessment of PR / OR / TW:**
1) All orals and practicals are to be assessed by external & internal examiners.
2) * Indicates TW to be assessed by external & internal examiners.
3) Other TW are to be assessed by internal examiner only.

**PROGRAMME- DIPLOMA IN INTERIOR DESIGN AND DECORATION**
**PROGRAMME STRUCTURE**
**LEVEL – 2**
**BASIC TECHNOLOGY COURSES**

| Sr. No. | Course Code | Course Title | PRQ | TEACHING SCHEME | | | | EXAMINATION SCHEME | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | TH | TU | PR | Total Credits | Theory Paper | | Test | PR | OR | TW | Total |
| | | | | | | | | Hrs | Mark | | | | | |
| 01 | 1264 | Primary Services | -- | 4 | -- | -- | 4 | 3 | 80 | 20 | -- | -- | -- | 100 |
| 02 | 1265 | Perspective Projections | -- | 1 | 1 | 4 | 6 | -- | -- | -- | 25 | -- | 25 | 50 |
| 03 | 1266 | 2D CADD | -- | 1 | -- | 4 | 5 | -- | -- | -- | 50 | -- | 50 | 100 |
| 04 | 1267 | Basic Professional Practice | -- | -- | -- | 4 | 4 | -- | -- | -- | -- | -- | 50 | 50 |
| 05 | 1268 | Interior Design | -- | 2 | -- | 6 | 8 | 6 | 80 | 20 | -- | 25 | 25 | 150 |
| 06 | 1269 | Basic Construction | -- | 3 | -- | 4 | 7 | 3 | 80 | 20 | -- | -- | 50 | 150 |
| **Total** | | | **--** | **11** | **1** | **22** | **34** | -- | **240** | **60** | **75** | **25** | **200** | **600** |

**Level: 2**

Total Courses : 06
Total Credits : 34
Total Marks : 600

**Assessment of PR / OR / TW:**

1) All orals & practicals are to be assessed by external & internal examiners.
2) * Indicates TW to be assessed by external & internal examiners.
3) Other TW are to be assessed by internal examiners.

**PROGRAMME- DIPLOMA IN INTERIOR DESIGN AND DECORATION**
**PROGRAMME STRUCTURE**
**LEVEL – 3**
**ALLIED COURSES**

| Sr No | Course Code | Course Title | PRQ | TEACHING SCHEME | | | | EXAMINATION SCHEME | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | TH | TU | PR | Total Credits | Theory Paper | | Test | PR | OR | TW | Total |
| | | | | | | | | Hrs | Mark | | | | | |
| 01 | 1316 | Secondary services | -- | 4 | -- | -- | 4 | 3 | 80 | 20 | -- | -- | -- | 100 |
| 02 | 1317 | Allied Materials and Products | -- | 4 | -- | -- | 4 | 3 | 80 | 20 | -- | -- | -- | 100 |
| 03 | 1318 | Estimating and management | -- | 3 | -- | 2 | 5 | 4 | 80 | 20 | -- | 50 | 50 | 200 |
| **Total** | | | **--** | **11** | **--** | **2** | **13** | **10** | **240** | **60** | **--** | **50** | **50** | **400** |

**Level: 3**

Total Courses : 03
Total Credits : 13
Total Marks : 400

**Assessment of PR / OR / TW:**

1) All orals and practicals are to be assessed by external & internal examiners.
2) * Indicates TW to be assessed by external & internal examiners.
3) Other TW are to be assessed by internal examiners.

**PROGRAMME- DIPLOMA IN INTERIOR DESIGN AND DECORATION**
**PROGRAMME STRUCTURE**
**LEVEL – 4**
**APPLIED TECHNOLOGY COURSES**

| Sr No | Course Code | Course Title | PRQ | TEACHING SCHEME | | | | EXAMINATION SCHEME | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | TH | TU | PR | Total Credits | Theory Paper | | Test | PR | OR | TW | Total |
| | | | | | | | | Hrs | Marks | | | | | |
| 01 | 1411 | Seminar | -- | -- | -- | 2 | 2 | -- | -- | -- | -- | -- | 50 | 50 |
| 02 | 1412 | Project | 65 CR | -- | -- | 4 | 4 | -- | -- | -- | -- | 50 | 50* | 100 |
| 03 | 1474 | Interior Construction Techniques. | -- | 3 | -- | 6 | 9 | 3 | 80 | 20 | -- | -- | 50 | 150 |
| 04 | 1475 | Working Drawing | -- | 3 | -- | 6 | 9 | 3 | 80 | 20 | -- | -- | 50 | 150 |
| 05 | 1476 | 3D CADD | -- | 1 | -- | 6 | 7 | -- | -- | -- | 50 | -- | 50 | 100 |
| **Total** | | | -- | **7** | **--** | **24** | **31** | -- | **160** | **40** | **50** | **50** | **250** | **550** |

**Level: 4**

Total Courses : 04
Total Credits : 31
Total Marks : 550

**Assessment of PR / OR / TW:**

1) All orals & practicals are to be assessed by external & internal examiners.
2) * Indicates TW to be assessed by external & internal examiners.
3) Other TW are to be assessed by internal examiners.

**Note:** In plant Training and Seminar

**PROGRAMME- DIPLOMA IN INTERIOR DESIGN AND DECORATION**
**PROGRAMME STRUCTURE**
**LEVEL – 5**
**DIVERSIFIED COURSES**

| Sr No | Course Code | Course Title | PRQ | TEACHING SCHEME | | | | EXAMINATION SCHEME | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | TH | TU | PR | Total Credits | Theory Paper | | Test | PR | OR | TW | Total |
| | | | | | | | | Hrs | Mark | | | | | |
| 01 | 1583 | Advance Interior Design | -- | 2 | -- | 8 | 10 | 8 | 160 | 40 | -- | 25 | 25 | 250 |
| 02 | 1584 | Specialty Interior Design | -- | 2 | -- | 8 | 10 | -- | -- | -- | -- | 50 | 100 | 150 |
| **Elective I :** Any **ONE** of the following | | | | | | | | | | | | | | |
| 03 | 1585 | Landscape Design | -- | 1 | -- | 4 | 5 | -- | -- | -- | -- | 50 | 50 | 100 |
| 04 | 1586 | Set Design | -- | 1 | -- | 4 | 5 | -- | -- | -- | -- | 50 | 50 | 100 |
| 05 | 1587 | Graphic Design | -- | 1 | -- | 4 | 5 | -- | -- | -- | -- | 50 | 50 | 100 |
| **Total** | | | -- | **05** | **--** | **20** | **25** | -- | **160** | **40** | -- | **125** | **175** | **500** |

**Level: 5**

Total Courses : 03
Total Credits : 25
Total Marks : 500

**Assessment of PR / OR / TW:**

1) All orals & practicals are to be assessed by external & internal examiners.
2) * Indicates TW to be assessed by external & internal examiners.
3) Other TW are to be assessed by internal examiners.

## PROGRAMME - DIPLOMA IN INTERIOR DESIGN AND DECORATION
## PROGRAMME STRUCTURE

## NON-EXAMINATION CREDIT COURSES

**(Any one course from each group is Compulsory for award of Diploma in Interior Design and Decoration)**

| Sr No | Course Code | Course Title | PRQ | Teaching Scheme | | | |
|---|---|---|---|---|---|---|---|
| | | | | TH | TU | PR | Total Credits |
| **Group: A:** Any **ONE** of the following | | | | | | | |
| 01 | 1001 | Physical Fitness | -- | -- | -- | 2 | 2 |
| 02 | 1002 | Aerobics | -- | -- | -- | 2 | 2 |
| 03 | 1003 | Yoga | -- | -- | -- | 2 | 2 |
| 04 | 1004 | Marshal Art | -- | -- | -- | 2 | 2 |
| **Group: B:** Any **ONE** of the following | | | | | | | |
| 05 | 1005 | Personality Development | -- | -- | -- | 2 | 2 |
| 06 | 1006 | Model Making | -- | -- | -- | 2 | 2 |
| 07 | 1007 | Repair of Domestic Appliances | -- | -- | -- | 2 | 2 |
| 08 | 1008 | Gardening | -- | -- | -- | 2 | 2 |
| 09 | 1009 | Public speaking | -- | -- | -- | 2 | 2 |
| 10 | 1010 | Computer hardware Maintenance | -- | -- | -- | 2 | 2 |
| 11 | 1011 | Mobile Repairing | -- | -- | -- | 2 | 2 |
| 12 | 1012 | Foreign Language | -- | -- | -- | 2 | 2 |
| 14 | 1014 | Two-Wheeler Maintenance | -- | -- | -- | 2 | 2 |
| 15 | 1015 | Youth empowerment and skills | -- | -- | -- | 2 | 2 |
| 14 | 1014 | Two-Wheeler Maintenance | -- | -- | -- | 2 | 2 |
| **Total** | | | -- | -- | -- | **04** | **04** |

Total Courses : 02
Total Credits : 04

## PROGRAMME: DIPLOMA IN INTERIOR DESIGN AND DECORATION

### Courses for Award of Class

| Sr. No. | Course Code | Course Title | PRQ | TEACHING SCHEME | | | | EXAMINATION SCHEME | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | TH | TU | PR | Total Credits | Theory Paper | | Test | PR | OR | TW | Total |
| | | | | | | | | Hrs | Marks | | | | | |
| 01 | 1317 | Allied Materials and Products | -- | 4 | -- | -- | 4 | 3 | 80 | 20 | -- | -- | -- | 100 |
| 02 | 1474 | Interior Construction Techniques | -- | 3 | -- | 6 | 9 | 3 | 80 | 20 | -- | -- | 50 | 150 |
| 03 | 1475 | Working Drawing | -- | 3 | -- | 6 | 9 | 3 | 80 | 20 | -- | -- | 50 | 150 |
| 04 | 1476 | 3D CADD | -- | 1 | -- | 6 | 7 | -- | -- | -- | 50 | -- | 50 | 100 |
| 05 | 1412 | Project | 65 CR | -- | -- | 4 | 4 | -- | -- | -- | -- | 50 | 50* | 100 |
| 06 | 1583 | Advance Interior Design | -- | 2 | -- | 8 | 10 | 8 | 160 | 40 | -- | 25 | 25 | 250 |
| 07 | 1584 | Specialty Interior Design | -- | 2 | -- | 8 | 10 | -- | -- | -- | -- | 50 | 100 | 150 |
| 08 | 1318 | Estimating and Management | -- | 3 | -- | 2 | 5 | 4 | 80 | 20 | -- | 50 | 50 | 200 |
| 09 | 1316 | Secondary Services | -- | 4 | -- | -- | 4 | 3 | 80 | 20 | -- | -- | -- | 100 |
| Any **ONE** From Elective | | | | | | | | | | | | | | |
| 10 | 1585 | Landscape Design | -- | 1 | -- | 4 | 5 | -- | -- | -- | -- | 50 | 50 | 100 |
| | 1586 | Set Design | -- | 1 | -- | 4 | 5 | -- | -- | -- | -- | 50 | 50 | 100 |
| | 1587 | Graphic Design | -- | 1 | -- | 4 | 5 | -- | -- | -- | -- | 50 | 50 | 100 |
| **Total** | | | -- | **23** | **--** | **44** | **67** | -- | **560** | **140** | **50** | **225** | **425** | **1400** |

Total Courses : 10
Total Credits : 67
Total Marks : 1400

**Assessment of PR/ OR/ TW**:

1) All orals & practicals are to be assessed by external & internal examiners.
2) * Indicates TW to be assessed by external & internal examiners.
3) Other TW are to be assessed by internal examiners.

# LEVEL -1

## FOUNDATION COURSES

**Programme :** Diploma Programme in CE / ME / PS / AE / DD / ID
**Course :** Computer Applications. **Course code :** 1110
**Prerequisite :** Nil

**Teaching & Examination Scheme:**

| Teaching Scheme | | | | Examination Scheme | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Hrs / week | | | Credits | TH Paper Hrs. | Marks | | | | | | |
| TH | TU | PR | | | | TH | TEST | TH+TEST | PR | OR | TW | TOTAL |
| -- | -- | 02 | 02 | -- | Max. | -- | -- | -- | -- | -- | 50 | 50 |
| | | | | | Min. | -- | -- | -- | -- | -- | 20 | -- |

**Rationale:**

This course imparts basic knowledge about computer, operating system, Microsoft Office to the students & develops competencies regarding effective presentation skills.

**Objectives:**

The students will able to

1. Use computer and operating system commands.
2. Conversant with Windows operating system.
3. Operate application packages and store, retrieve, arrange, print information through them.
4. Understand database management system.

**Contents: Laboratory Work**

| Topic No. | Topic & Subtopic | Hours |
|---|---|---|
| 1 | **Introduction to Operating system**<br>- Windows Operating System.<br>- Concept of Windows-Arranging, Moving, Resizing, Opening, and Closing of windows, Windows Explorer<br>- Folder/ File Management-Search, copy, delete and rename files and folders, Windows Desktop<br>- Windows Accessories: Notepad, Word Pad, Paint | 02 |
| 2 | **Word processing software - MS-WORD**<br>- Creating, editing document<br>- Using various editing and formatting features.<br>- Inserting objects ( Clip Art etc. )<br>- Printing<br>- Using Word – Art, Mail - merge facility | 01 |
| 3 | **Data analysis software - MS-EXCEL**<br>- Introduction to electronic spreadsheet<br>- Creating, editing spreadsheet<br>- Using formulas<br>- Creating charts Pie and Bar Charts<br>- Inserting Objects<br>- Using various editing and formatting features | 01 |
| 4 | **Presentations software - MS-POWER POINT**<br>- Creating a slide<br>- Adding various features to slide<br>- Editing and formatting slide<br>- Inserting clipart | 02 |

| Topic No. | Topic & Subtopic | Hours |
|---|---|---|
| | - Creating animation effects - Slide - show<br>- Record narration | |
| 5 | **Database software - MS. ACCESS**<br>- Data types and format<br>- Working with Tables.<br>o Concept of table.<br>o Creating table by design view and wizard<br>o Editing tables<br>o Entering and editing data in table<br>- Working With Query<br>o Creating Query By Design View<br>o Creating Query By Using Query Wizard<br>- Working With Forms<br>o Creating Form By Design View<br>o Creating Form By Using Form Wizard<br>- Working With Report<br>o Creating reports Using Design View<br>o Creating Report Using Report Wizard | 04 |
| | **Total** | **10** |

**Laboratory Assignments:**

| SN | List of Experiments | HRS |
|---|---|---|
| 1. | Write a job application to HR Manager of an industry using MS - Word. | 02 |
| 2. | Design a database using mail-merge in MS - Word for above letter. | 02 |
| 3. | Implementation of features like auto correct, auto format, spell check, insert, table handling etc in Ms-Word. | 02 |
| 4. | Design a worksheet in MS- Excel for a Student Mark sheet. | 02 |
| 5. | Implementation of Excel Features like conditional formatting, Wizard, Data, Filter. | 02 |
| 6. | Create Pie and Bar Charts in MS-Excel with Specific Example. | 02 |
| 7. | Sort all records of a worksheet in ascending and descending order. | 02 |
| 8. | Design a Slide show giving animation effects in Ms-PowerPoint. | 02 |
| 9. | Creation of email account | 02 |
| 10. | Design a query for selecting all records from table and also create report showing all records. | 02 |
| 11. | Design a query to select a record having name "ABC" from student database. | 02 |
| | **Total** | **22** |

**Learning Recourses: Text Books:**

| SN | Author | Title | Publisher |
|---|---|---|---|
| 1 | Peter Norton | Introduction to Computers. | Tata McGraw Hill |
| 2 | Microsoft | Windows 95 / 9B / NT / 2000 Operating System | Microsoft Corp. |
| 3 | Microsoft | Microsoft Office | Tata McGraw Hill |

**Suggested Instructional Strategies:** Demo lectures with power point presentations using LCD.

**Programme :** Diploma Programme in Interior Design and Decoration (ID).
**Course :** Basic Design. **Course code :** 1125
**Prerequisite :** Nil

**Teaching & Examination Scheme:**

| Teaching Scheme | | | | Examination Scheme | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hrs / week | | | Credits | TH Paper Hrs. | Marks | | | | | | | |
| TH | TU | PR | | | | TH | TEST | TH+TEST | PR | OR | TW | TOTAL |
| 04 | -- | 06 | 10 | 03 | Max. | 80 | 20 | 100 | -- | 25 | 25 | 150 |
| | | | | | Min. | 32 | -- | 40 | -- | 10 | 10 | -- |

**Rationale:**

This course is the core course of the total course and forms the Spine of the interior design profession, which intends to equip the students with thorough knowledge of basic concepts of interior design. The students shall also learn planning process and develop creative skills required for the Courses – Interior design, Advance design and Specialty design of second, third and fourth semesters respectively.

**Objectives:**

The student will be able to

1. Understand the importance of the role of interior designer and be able to differentiate between design and decoration.
2. Use tools of interior design based on Aesthetical, Functional & Technological aspects.
3. Identify Concepts with approach; Styles & Historical Periods; and Themes
4. Implement Processes of Design

**Contents:Theory**

| Topic No. | Topic & Subtopic | Hours | Marks |
|---|---|---|---|
| 1 | **Interior Design and Decoration**<br>1.1 Understanding design and décor<br>1.2 Importance of design – Optimisation, Economical<br>1.3 Importance of design - Time, Maintainability, Multiplicity<br>1.4 Role of Interior Designer<br>1.5 Interest of user w. r. t. economy, comfort, safety & security.<br>1.6 limitations on interior design due to existing external constraints such as, entries & exits( points of egress), positions of windows, ventilators; sunks,<br>1.7 Structural elements.<br>1.8 Universal design to cater all types of users, including differently abled.<br>1.9 Scope of work- new projects and refurbishments (Additions & alterations) | 10 | 14 |
| 2 | **Tools of Interior Design**<br>2.1 Understanding aesthetical, functional, technological aspects. Aesthetical tools<br>2.2 Principles of Design – Balance, Emphasis, Rhythm, Harmony, Scale and Proportion<br>2.3 Elements of design – Point, Line, Shape, Form, Colour with | 18 | 40 |

| Topic No. | Topic & Subtopic | Hours | Marks |
|---|---|---|---|
| | the colour theory, Texture and Pattern<br>2.4 Aesthetical design consideration<br>Physical – (touch, smell. )<br>Social – (Interactive, status symbols. )<br>Psychological – (Emotional comfort, Derivable Pleasure from use. )<br>Ideological–(Patriotic, Socialistic, Environmental. )<br>Opinions – (Influenced by associations such as Newness, Nostalgic, Thrill, Risk involved, Safety, reliability. )<br>2.5 Functional tools<br>Ergonomics- study of ergonomics Postures, Anthropometrics, Biomechanics Zoning, Grids, Modulation of space within and without, envelope space (furniture, room) | | |
| 3 | **Design Concepts**<br>3.1 Concepts –<br>(Manifestation of realization through Contemplative germination and evolution of thought that gives design approach, although with clear understanding that the concept can be explained but not defined. ) (Not for examination)<br>Styles -<br>Historical & Cultural approach (Stress shall be given on identification of Classical Period, Medieval Period, 19th Century and Oriental. Focus of study shall be on Indian and Contemporary Period) | 26 | 20 |
| | 3.2 Occidental<br>Classical Period Contemporary Period<br>Medieval Period Oriental<br>19th Century | | |
| | 3.3 Japanese style, Chinese style, Thai style, Indian style<br>Themes – (The common thread that binds the entire design in a story line such as Beach, 'Mela', Dessert, Village. ) | | |
| 4 | **Planning Process**<br>4.1 Understanding General process of design (Need –Design brief –Information collection – Developing Alternatives - Analysis –Solution)<br>4.2 Planning Process of Interior Design<br>Design Brief –<br>a. Simple and clear description about what is to be Designed<br>b. Relevant Data collection such as location & condition of site, Client profile & requirements, Materials.<br>c. Data Analysis – Analysing and forming alternative schemes based on personal interpretations of design and relevant data using design tools and design concepts.<br>d. Selection – Finalising the best scheme. | 10 | 06 |

| Topic No. | Topic & Subtopic | Hours | Marks |
|---|---|---|---|
| | e. Presentation – (Presentation and Technical Drawings) | | |
| | **Total** | **64** | **80** |

| SN | List of Practical: |
|---|---|
| | **Draw to scale - considering the given parameters:** |
| 1 | Illustrate the Principles of Interior design using Elements of design. |
| 2 | Ergonomical study (activity wise) w. r. t. postural & psychological comforts for normal and differently abled users. |
| 3 | **AStanding:**<br>Cooking — Working at shop / bank counters<br>Drafting — Bathing & using urinals<br>Opening doors & using overhead units |
| 4 | **Squatting**<br>Using Indian W. C. / squats — Manual sweeping & mopping<br>Using storages below counters<br>**Sitting:**<br>Working on computers / work tables — Discussing<br>Dining — Using European W. C.<br>Relaxing |
| 5 | **Sleeping:** Sleeping, Resting |
| 6 | Sketches of the elements such as entablatures, cornices, base, capital, column, beam, relief work, stucco work, sculptures, furniture for the following periods**:**<br>**Occidental**<br>Classical Period, Medieval Period, 19th Century, Contemporary Period,<br>**Oriental**<br>Japanese style, Chinese style, Thai style, Indian style |
| 7 | **Case studies w. r. t. aesthetics and functionality**<br>Living rooms & Lounges — Bed rooms, Hotel suites<br>Kitchens (residential & hotels) — Toilets (residential, commercial)<br>Dining areas (residential & hotels)<br>Work areas (study rooms, offices, shops, conference rooms, executive cabins) |

**Learning Resources: Text Books:**

| SN | Author | Title | Publisher |
|---|---|---|---|
| 1 | Joseph De Chaira<br>Jullius<br>Panero Martin Zelnik | Time Saver Standard for Interior Design & Space Planning | Mcgraw Hill New York |
| 2 | John Pile | Interior Design | Harry N. Adry Publishers |
| 3 | Ahmed Kasu | Interior Design | TWAIN Pub. Bombay |
| 4 | Jullius Panero, Martin Zelnik | Human Dimensions and Interior Spaces | Whitney Library<br>New York |
| 5 | Phillis Sleen, Allen | Beginning of Interior Environment | New York |
| 6 | Shirish Bapat | Basic Design of Anthropometry | Bela books Publishers |
| 7 | Shirish Bapat | Living Area (Interior Space) | Bela books Publishers |
| 8 | Francis D. K. , Ching | Interior Design Illustrated | Van Norstrund, New Delhi |
| 9 | V. S. Pramar | Design Fundamental in 1st architecture | Somaiya Pub. Pvt. Ltd. |

**Programme :** Diploma Programme in Interior Design and Decoration (ID).
**Course :** Basic Materials and Products. **Course code :** 1126
**Prerequisite :** Nil

**Teaching & Examination Scheme:**

| Teaching Scheme | | | | Examination Scheme | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Hrs / week | | | Credits | TH Paper Hrs. | Marks | | | | | | |
| TH | TU | PR | | | | TH | TEST | TH+TEST | PR | OR | TW | TOTAL |
| 04 | -- | -- | 04 | 03 | Max. | 80 | 20 | 100 | -- | -- | -- | 100 |
| | | | | | Min. | 32 | -- | 40 | -- | -- | -- | -- |

**Rationale:**

The knowledge of basic materials and products shall help the learner to enable their use, through methods of construction, for designing Interior spaces. The knowledge of such materials & products along with various construction techniques & knowledge of services enable students to achieve desired design outcome.

**Objectives:**

The student will be able to

1. Understand and select common building materials based on their properties.
2. Understand and select plumbing material as per requirements.
3. Understand and select electrical and lighting material as per requirements.
4. Understand and select floor coverings as per requirements.

**Contents:Theory**

| Topic No. | Topic & Subtopic | Hours | Marks |
|---|---|---|---|
| 1 | **Common Building Materials**<br>1.1 STONE<br>Geological, Physical and Chemical classification<br>Types, sizes, properties and use of Igneous, Sedimentary and Metamorphic stones<br>1.2 CLAY<br>Types, Quality, Properties & Applications of Clay<br>Types, Quality & Properties of Brick<br>Types, Quality, Properties of Terracotta<br>Processing such as vitrifying, glazing.<br>(Not for Examination)<br>1.3 CEMENT, LIME, SAND AND GYPSUM<br>Types & Properties of Cement, Lime, Fine and Course Aggregates<br>Types & Applications of Concretes, Mortars and Plasters<br>Properties & Applications of Gypsum & its products<br>1.4 TIMBER<br>Classification and growth of trees and types of Timber<br>Quality & Properties of Timber, Defects in Timber<br>Seasoning & Preservation of Timber and other woods (Not for Examination)<br>Uses of Hardwood and Softwood such as Teak, Rose, | 38 | 50 |

| Topic No. | Topic & Subtopic | Hours | Marks |
|---|---|---|---|
| | Deodar, Sal, Cedar, Silver, Ebony. in edging, beading, moulding, battens, sections, planks, boards.<br>Uses of cane, bamboo. in making of furniture.<br>1.5 WOOD PRODUCTS<br>Types, Quality & Uses of Veneers and Plywood<br>Types, Quality & Uses of Block Board, Particle Board, Fibre Board, Chip Board, Hard Board.<br>Laminates and process of lamination. Process of Inlays, Post forming. (Not for examination) | | |
| 2 | **Plumbing & Sanitary Materials**<br>2.1 Types, Sizes & Quality of Pipes, Specials, Joints, Fittings and Fixtures for Water supply systems<br>2.2 Types, Sizes & Quality of Pipes, Specials, Joints, Fittings and Fixtures for Drainage systems<br>2.3 Types & Sizes of Sanitary wares such as wash hand basins, Pans, Urinals, Bidets, Water Closets, Flushing Cisterns, Bath tubs, Shower cubicles.<br>2.4 Types & Sizes of accessories such as roll-holders soap dishes, towel rods, napkin holders, and other racks, hooks & rings. (Not for examination) | 12 | 12 |
| 3 | **Electrical & Lighting Materials**<br>3.1 Types & Sizes of wires, conduits, casing capping,<br>3.2 Types & Sizes of Electrical fixtures such as roses, holders, switches, sockets, switchboards, MCB, ELCB.<br>3.3 Types & Sizes of Electrical & Light fittings such as fans, Tube light fittings, Lamp fittings, Chandeliers. | 08 | 12 |
| 4 | **Floor Coverings**<br>4.1 Rugs, durries and carpets of natural fibres, Carpets, PVC floors, Wood slats.<br>4.2 Floor coverings of synthetic fibres and in rolls such as PVC carpets Miscellaneous floor coverings such as cork, parquet, rubber. | 06 | 06 |
| | **Total** | **64** | **80** |

**Learning Resources:**
**Text Books:**

| SN | Author | Title | Publisher |
|---|---|---|---|
| 1 | D. N. Ghosh | Materials of constructions | Tata McGraw Hill |
| 2 | Gurucharan Singh | Building Materials | Standard Pub, & Dist |
| 3 | S. C. Rangawala | Engineering Materials | Charottar Pub. Anand (India). |
| 4 | K. P Roy Choudhary | Engineering Materials | Oxford Press, New Delhi |
| 5 | S. C. Rangawala | Water Supply & Sanitary Engineering | Charottar Pub. Anand (India). |
| 6 | William Rupp | Construction Materials of Interior Design | Whitney Library |

**Programme :** Diploma Programme in Interior Design and Decoration (ID).
**Course :** Paraline Projection. **Course code :** 1127
**Prerequisite :** Nil

**Teaching & Examination Scheme:**

| Teaching Scheme | | | | Examination Scheme | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Hrs / week | | | Credits | TH Paper Hrs. | Marks | | | | | | |
| TH | TU | PR | | | | TH | TEST | TH+TEST | PR | OR | TW | TOTAL |
| 02 | -- | 06 | 08 | -- | Max. | -- | -- | -- | -- | -- | 100 | 100 |
| | | | | | Min. | -- | -- | -- | -- | -- | 40 | -- |

**Rationale:**

The students learn the graphical language that is used extensively in communicating design thought:constructional methods and techniques in the form of presentation and technical drawings to a definite proportion and scale by using praline projections. It also intends to equip the students in communicating with clients, consultants and contractors in the profession.

**Objectives:**

The student will be able to

1. Use drafting instruments and develop drafting skills.
2. Use graphical language along with lettering techniques.
3. Use of scale and its importance.
4. Represent three-dimensional objects in two-dimensional and three-dimensional
5. Views using parallel line projections.
6. Use various mediums and presentation materials for drawing presentation.
7. Prepare three-dimensional objects.
8. Graphically represent shades and shadows of objects.
9. Prepare technical and presentation drawings.

**Contents:Theory**

| Topic No. | Topic & Subtopic | Hours |
|---|---|---|
| 1 | **Basic of Graphical Representation**<br>1.1 Study of line, shape and form.<br>1.2 Study of pattern, texture, weight, gradation and value.<br>1.3 Study of material indication, annotation, interpretation of lines and lettering techniques.<br>1.4 Principals of representation of volumes, solids and objects using static and dynamic visualization<br>1.5 Principals of representation of volumes, solids and objects using imagery perception. | 8 |
| 2 | **Basic of Technical Drawing**<br>2.1 Study of drafting techniques and use of drafting tools. Methodology of representing lines and shapes.<br>2.2 Scale and proportion, principles of parallel line projection. | 4 |
| 3 | **Paraline Projections**<br>3.1 Orthographic projections (Plan, Elevations, and sections)<br>3.2 Oblique projections (cavalier and cabinet) Axonometric projections (Isometric, military, and other) | 9 |

| Topic No. | Topic & Subtopic | Hours |
|---|---|---|
| 4 | **Rendering & Presentation Techniques**<br>4.1 Rendering techniques using graphite and colour pencils, pen and ink, watercolours, Photo (Fuji) colours, dry pastels, poster colours, (combination of inks with water colours, inks with colour pencils. ) study of rendering effects (siography, light, and reflection of light. )<br>4.2 Study of preparing presentation and technical drawings. | 8 |
| 5 | **Three Dimensional Object Study**<br>5.1 Study of basic 3D geometrical forms, combination of 3D forms, (not for examination) | 3 |
| | **Total** | **32** |

**Laboratory Work:**

| SN | List of practicals: |
|---|---|
| | **Draw to scale - considering the given parameters:** |
| 1 | Three-dimensional sketches in static (one position) and in dynamic (different stills in motion about X, Y, Z axes) of volumes and solids such as<br>A**:**Cube, pyramids, prisms, cone, tetragons.<br>B**:**Sofa, chairs, tables, storage units. |
| 2 | Different patterns and textures with variation in terms of weight, gradation and value. |
| 3 | Plans, elevations and sections of furniture objects which would encompass different geometric forms. (minimum 8 to 10 furniture objects. ) |
| 4 | Isometric view of simple furniture objects.<br>A**:**Minimum 4 furniture objects.<br>B**:**Room with furniture objects. |
| 5 | Axonometric view of simple furniture objects.<br>A**:**Minimum 4 furniture objects.<br>B**:**Room with furniture objects. |
| 6 | Prepare a fully rendered presentation drawing including plans and sectional elevations of any residential interiors such as living room, bed room. or commercial space such as executive's/director's cabin, waiting lounge of a hotel, open office area. ( A1 size, white or coloured, plain or textured sheets) |
| 7 | Prepare technical drawing including plans, sectional elevations of residential or commercial interiors such as toilets, kitchens. |

**Learning Resources:**

**Text Books:**

| SN | Author | Title | Publisher |
|---|---|---|---|
| 1 | N. D. Bhatt | Engineering drawing (plane and solid geometry) | Charottar Pub. Anand, (Guj) |
| 2 | Ahmed Kasu | Interior design | Twain Pub. Bombay. |
| 3 | Grant reid asla landscape | Graphics | Whitney library, New York. |
| 4 | S. C. Rein Koff. | Interior graphics and design standard. | Whitney library, New York. |
| 5 | Robert W. Gill. | The Thames and Hudson manual of rendering with pen and ink. | The Thames and Hudson ltd. London |

**Programme :** Diploma Programme in Interior Design and Decoration (ID).
**Course :** Communication Techniques & Life skills **Course code :** 1128
**Prerequisite :** Nil

**Teaching & Examination Scheme:**

| Teaching Scheme | | | | Examination Scheme | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Hrs / week | | | Credits | TH Paper Hrs. | Marks | | | | | | |
| TH | TU | PR | | | | TH | TEST | TH+TEST | PR | OR | TW | TOTAL |
| 02 | -- | 02 | 04 | -- | Max. | -- | -- | -- | -- | -- | 50 | 50 |
| | | | | | Min. | -- | -- | -- | -- | -- | 20 | -- |

**Rationale:**

The course intends to enhance Verbal and Non-verbal Communication Skills of students with an intention to improve the language and conversational ability through different media such as face to face, presentations, written, graphic, audio. It aims at making students understand how the different types and forms of communication are suited and selected for differing situations.

**Objectives:**

The student will be able to

1. Understand concepts, principles, procedures and components of communication.
2. Interpret reasons of communication failure and source respective remedies.
3. Classify communication and select appropriate media.
4. Draft business letters and reports pertinent to interior designing profession

**Content:Theory**

| Topic No. | Topic & Subtopic | Hours |
|---|---|---|
| 1 | **Basics of Communication**<br>1.1 Definition of communication, Process of communication (Defining context, Knowing audience, Designing message, Encoding, Selecting proper channel, Transmitting, Receiving, Decoding and Feedback)<br>1.2 Elements of communication (Sender, Receiver, Message, Channel, Feedback and Context)<br>1.3 Principles of communication (Definition, Purpose, 7Cs, Effective messaging. )<br>1.4 Knowing & overcoming barriers to effective communication<br>1.5 Types of communication (Formal, Informal), Forms of communication (Verbal, Non-Verbal & Written) Direction of communication (Lateral, Vertical:Upward & Downward, Diagonal), Different media of communication (Audio, Video, Audio visual, Graphic, Written, Print, Electronic. ) | 10 |
| 2 | **Verbal Communication**<br>2.1 Introduction (Designing messages, preparation, practice and presentation of written and graphic contents) International phonetic script<br>2.2 Vocalic (aspects of speech such as tone, emphasis, pitch, volume, pauses, undulations, timbre. ) Presentation skills for an individual | 06 |

| Topic No. | Topic & Subtopic | Hours |
|---|---|---|
| | and in a group | |
| 3 | **Non-Verbal Communication**<br>3.1 Codes of communication (Body language, Chronemics & Artefacts)<br>3.2 Body language (Kinesics - eye contact, gesture, postures, body movements and facial expression; Proxemics - using space, Physical Appearance; Haptics – touch) Chronemics (managing time). Artefacts (environment & objects)<br>3.3 Using combination of non-verbal and verbal communication<br>3.4 Using & interpreting visuals - tables, graphs, charts. | 08 |
| 4 | **Written Communication**<br>4.1 Designing message outline - Organizing ideas, determining the general and specific purpose of communication, implementing principles of written communication in messages, analyzing the receiver of written messages, context, scope. Writing topic sentences, paragraphs, function paragraphs, summary, information text Forms of written messages<br>4.2 Drafting reports:short reports, concept and contents of long reports, effective sentence construction, punctuation and presentation of the text | 08 |
| | **Total** | **32** |

**Laboratory Work**

| SN | List of practicals: |
|---|---|
| 1 | Drafting the diagram of process of communication with all its components in different communication situations. |
| 2 | Lab experiments in language lab –pronunciation of correct sounds -reading given text |
| 3 | Explain the concepts and process of encoding, decoding, feedback and barriers. |
| 4 | Exercises on kinesics, proxemics, hepatics, chroemics, artefacts. |
| 5 | Group discussion on the topic –group of 5 students will perform and will write the discussion |
| 6 | Give examples how the 7 Cs of communication are put into the practice while Communicating. |
| 7 | Simple exercises on basic grammar such as construction of sentences, identifying mistakes in sentences, punctuation, modifications, transformation of sentences, using proper verbs of forms of verbs, phrases. |
| 8 | Presentation Skills – Role model, paper presentations |
| 9 | Report Writing including graphs, pie chart, Bar Charts etc. |
| 10 | Technical report of visit to site/factory/exhibition focusing on interior design relevance. |
| 11 | Study the diagram/ graph below and answer the questions followed. |
| 12 | Mini Project-Topic given (the teacher will give a topic and each student will collect information on it) |

**Learning Resources:**

**Text Books:**

| SN | Author | Title | Publisher |
|---|---|---|---|
| 1 | Kemeth Kiewra Nelson F. Dubors | Learning to learn | Allyn & Bacon |
| 2 | E. H. McGrath | Basic Managerial Skills for all | Prentice hall of India |
| 3 | P. D. Kulkarni & B. B. Sharma | Independent Study Techniques | T. T. T. I Chandigarh |
| 4 | Elizabeth Hierney | 101 Ways to Better Communication | Kogan Page |
| 5 | Malvika Nagarkar | Communication Skills | M. S. B. T. E |
| 6 | Wren & Martin | English Grammar | Chand Books |
| 7 | Malavika Nagarkar | Communication Skills for Polytechnic students | M. S. B. T. E |
| 8 | Human Communication | Burgoon Michae | London**:**Sage Publication |
| 9 | Geofery Leech & Jan Svartvik | A Communicative grammar of English | Essex Longman Group Ltd. ELBS. |
| 10 | Randolef Quirk & Sidney Greenbaum | University grammar of English | Essex Longman Group Ltd. ELBS. |
| 11 | John Sinclair (Ed) | Collins Cobuild English Grammar | Essex Longman Group Ltd. ELBS. |
| 12 | Thomas Huckin & Leslie Olson | Technical writing and Professional communication | London:William Collins & Sons Co. |
| 13 | Lyn Clark & Zimmer | Business English & Communication | New York**:**Mcgraw Hill |
| 14 | John Thill &Courtland | Excellence in Business Communication | New York**:**Mcgraw Hill |
| 15 | R. K. Bansal & J. B. Harrison | Spoken English for India | New York**:**Mcgraw Hill |
| 16 | J. D. O' Conner | Better English Pronunciation | New Delhi**:**Orient Longman |
| 17 | Krishna Mohan & Meera Bannerji | Developing Communication Skills | London**:**Cambridge University Press ELBS, Macmillan |

# LEVEL-2

## BASIC TECHNOLOGY COURSES

**Programme :** Diploma Programme in Interior Design and Decoration (ID).
**Course :** Primary Services. **Course code :** 1264
**Prerequisite :** Nil

**Teaching & Examination Scheme:**

| Teaching Scheme | | | | Examination Scheme | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hrs / week | | | Credits | TH Paper Hrs. | Marks | | | | | | | |
| TH | TU | PR | | | | TH | TEST | TH+TEST | PR | OR | TW | TOTAL |
| 04 | -- | -- | 04 | 03 | Max. | 80 | 20 | 100 | -- | -- | -- | 100 |
| | | | | | Min. | 32 | -- | 40 | -- | -- | -- | -- |

**Rationale:**

The course intends to equip the students with concept and principles of Basic services. It will develop their skills in understanding the function of services and help optimise the resources such as water, electricity. It will also develop the analytical skills in designing appropriate services layout and schemes.

**Objectives:**

The student will be able to

1. Apply concepts of primary services
2. Use appropriate resources including optimisation
3. Design layouts for services

**Contents:Theory**

| Topic No. | Topic & Subtopic | Hours | Marks |
|---|---|---|---|
| 1 | **Water Supply, Sanitation and Drainage**<br>1.1 Introduction to principles of Water Supply, Sanitation & Drainage<br>1.2 Cold and Hot water distribution & mixing systems using loft tanks, pressure pumps, geysers, boilers, mixers, diverters. Waste and Soil Disposal systems using principles of Siphoning, Anti-Siphoning, Venting. (Focus on traps)<br>1.3 Distribution & Disposal (Open and Concealed) for**:**<br>Cooking and Drinking – (Focus on Kitchen and Pantry areas)<br>Washing – (Manual and Machine based. )<br>Bathing – (Modes such as shower, pressure jet sand tubs<br>Flushing – (Urinal, Water Closet and Toilet areas Miscellaneous - (Gardening, Indoor Fountain, Falls, Cascades) Understanding Distribution and Disposal layouts in context with appropriate gradients & Sizes, waterproofing consideration, appropriate use of specials such as joints & junctions.<br>water supply and drainage layout for cooking and drinking areas. washing areas. Bathing areas, Flushing areas, Ancillary areas, distribution and disposal for given layout with consideration of gradient Pipe sizes, water proofing with use of specials along with legend. | 26 | 30 |
| 2 | **Electrification**<br>2.1 Introduction (single and three phase, earthling, neutral, volts, amps and wattage relation), loading requirements. | 20 | 22 |

| Topic No. | Topic & Subtopic | Hours | Marks |
|---|---|---|---|
| | 2.2 Principles of Distribution, and limitations of electrification (leakage, fluctuations, safety, excess loading, interferences.)<br>2.3 Wiring standards and specifications (Sheathing, shielding, cross-sectional area, colour coding. ), circuit wiring and installation systems (Open and Concealed).<br>2.4 Understanding Distribution layouts in context with appropriate loading use, wire sizing, sheathing consideration and appropriate use of specials such as joints & junctions.<br>2.5 Electrical layout for given interior space with consideration of loading use, specials along with legend<br>2.6 Calculating required illumination for given activity layout<br>2.7 Calculating required illumination for given activity layout | | |
| 3 | **Light and Lighting**<br>3.1 Introduction to Light (Natural & Non-natural light, Terminology such as Illumination, Lux, Lumens, Maintenance and Utility factors, Glare. ).<br>Calculating the requirements according to the required levels of illumination.<br>3.2 Quality of light such as Incandescent, Fluorescent, vapour lamps, halides & halogen, gas-filled such as neon, argon. and lasers.<br>3.3 Principles of Light (Transmission, reflection, distortion, refraction, inverse law. ). Types of lighting – i. e. Direct and Indirect (diffused, reflected).<br>3.4. Selection of activity based types of illumination such as Ambient, Task, Ascent – Focus, Information such as step lighting, Signage. and selection of systems of Lighting such as up, down, side and cove lighting, track lighting. | 12 | 16 |
| 4 | **Natural Heating**, **Ventilation and Conditioning of Air.**<br>4.1 Physical Human comforts – Climate based (Quality of Air, Temperature, Humidity) (Not for Examination)<br>4.2 Principles of Ventilation; Natural Ventilation.<br>Transmission of Heat; Control by natural means | 06 | 12 |
| | **Total** | **64** | **80** |

**Learning Resources:**

**Text Books:**

| SN | Author | Title | Publisher |
|---|---|---|---|
| 1 | F. Hall | Plumbing technology | British Library Cataloguing in Publication Data |
| 2 | Shubhangi Bhide | Building services and equipments | Rudra offset |
| 3 | H. L. Ohri | Water Supply and Sanitary Engineering | Charotar PublishingHouse |
| 4 | A. C. Panchdhari | Water Supply and sanitary installations | Bureau of Indian Standards, New Delhi |
| 5 | Mr. Sandeep Mantri | Practical Building Construction & its mgmt | Mantri projects & consultancy Pvt. ltd |
| 6 | B. Raja Rao | Electricity for Architects | Technical Book publisher |
| 7 | Norbert Lechner | Heating, cooling, lighting Design | Library of congress Cataloguing in Publication Data |

**Programme :** Diploma Programme in Interior Design and Decoration (ID).
**Course :** Perspective Projections. **Course code :** 1265
**Prerequisite :** Nil

**Teaching & Examination Scheme:**

| Teaching Scheme | | | | Examination Scheme | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Hrs / week | | | Credits | TH Paper Hrs. | Marks | | | | | | |
| TH | TU | PR | | | | TH | TEST | TH+TEST | PR | OR | TW | TOTAL |
| 01 | 01 | 04 | 06 | -- | Max. | -- | -- | -- | 25 | -- | 25 | 50 |
| | | | | | Min. | -- | -- | -- | 10 | -- | -- | -- |

**Rationale:**

This course equips the students with thorough understanding and skills of drawing perspective views that enable both, the designer and the client, to visualize the design in an effective manner.

**Objectives:**

The student will be able to

1. Prepare rendered one-point perspective view of interior spaces.
2. Prepare rendered two-point perspective view of interior spaces.

**Contents:Theory**

| Topic No. | Topic & Subtopic | Hours |
|---|---|---|
| 1 | **Principles of Perspective**<br>1.1 One point perspectives<br>1.2 Two point perspectives<br>1.3 Three point perspective (only to be explained as variation of converging points. (Not for examination) | 04 |
| 2 | **One Point Perspective**<br>2.1 Picture plane in front of the object.<br>2.2 Picture plane behind the object.<br>2.3 Picture plane in between the object. (to be explained as combination of the above assessments) | 06 |
| 3 | **Two Point Perspective**<br>3.1 Picture plane in front of the object.<br>3.2 Picture plane behind the object.<br>3.3 Picture plane in between the object. (to be explained as combination of the above assessments) | 06 |
| | **Total** | **16** |

**Laboratory Work:**

| SN | List of Tutorials: |
|---|---|
| | Draw Sketches in journal (Large size Square grid pad) OR Drawing Sheet**:** |
| 1 | Draw perspective of a room with relevant block furniture for the following positions of the picture plane, (2 plates each)<br>ONE POINT<br>Picture plane in front of the room.<br>Picture plane behind the room. Picture plane in between the room.<br>Render any one of the above views using best rendering medium skills acquired by the individual student. |
| 2 | TWO POINT<br>Picture plane in front of the room.<br>Picture plane behind the room.<br>Picture plane in between the room.<br>Render any one of the above views using best rendering medium skills acquired by the individual student. |

| SN | List of Practical: |
|---|---|
| | Draw to scale - considering the given parameters**:** |
| 1 | Draw perspective of a room with relevant block furniture for the following positions of the picture plane, (2 plates each)<br>ONE POINT<br>Picture plane in front of the room.<br>Picture plane behind the room.<br>Picture plane in between the room.<br>Render any one of the above views using best rendering medium skill sacquired by the individual student. |
| 2 | TWO POINT<br>Picture plane in front of the room.<br>Picture plane behind the room.<br>Picture plane in between the room.<br>Render any one of the above views using best rendering medium skill sacquired by the individual student. |

**Learning Resources:**

**Text Books:**

| SN | Author | Title | Publisher |
|---|---|---|---|
| 1 | Graphic Shaw | Interior Perspectives to Architectural Designs | Graphic Shaw |
| 2 | Shankar Mulik | A Text Book of perspective sand graphics | Allied Pub. Bombay |
| 3 | Robert W. Gill | The Thames and Hudson Manual of Rendering with penand ink | Thames & Hudson Ltd. London |
| 4 | F. D. K. Ching | Perspective Drawing | -- |

**Programme :** Diploma Programme in Interior Design and Decoration (ID).
**Course :** 2D CADD. **Course code :** 1266
**Prerequisite :** Nil

**Teaching & Examination Scheme:**

| Teaching Scheme | | | | Examination Scheme | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Hrs / week | | | Credits | TH Paper Hrs. | Marks | | | | | | |
| TH | TU | PR | | | | TH | TEST | TH+TEST | PR | OR | TW | TOTAL |
| 01 | -- | 04 | 05 | -- | Max. | -- | -- | -- | 50 | -- | 50 | 100 |
| | | | | | Min. | -- | -- | -- | 20 | -- | 20 | 40 |

**Rationale:**

This course intends the student to understand the importance of 2D CAD for preparing and exchanging drawings. The use of CADD software will increase productivity and lessen rework of drawings thereby saving time.

**Objectives:**

The student will be able to use

1. Basic computer interface.
2. 2D CADD interface.
3. Various drafting and editing techniques.
4. Plotting and printing.

**Contents:Theory**

| Topic No. | Topic and Subtopics | Hours |
|---|---|---|
| 1 | **Introduction To Computer Interface**<br>1.1 Windows interface, left and right click significance.<br>1.2 Explorer- creating/deleting folders, saving in folders,<br>1.3 managing files creating icons.<br>1.4 Introduction to drawing and rendering software<br>1.5 Introduction to 2D CADD interface | 04 |
| 2 | **Setting Up A Drawings**<br>2.1 Units, Limits<br>2.2 Zoom commands<br>2.3 Layer manager and standard<br>2.4 Status bar | 04 |
| 3 | **2D Drawings Techniques**<br>3.1 Drafting commands<br>3.2 Modify command<br>3.3 Formatting text and dimensions | 05 |
| 4 | **Plotting and Printing**<br>4.1 Plot style manager<br>4.2 Using Internet for storing and exchanging drawings | 03 |
| | **Total** | **16** |

**Laboratory Work:**

| SN | List of Practical |
|---|---|
| 1 | Draft plan and elevations of a T. W table. |
| 2 | Draft plan, sections and elevations of a double bed with storage below. |
| 3 | Draft plan, elevations and sections of furniture objects, complete with dimensioning, text, hatch, using different layers. (6-8 objects to be drafted) |
| 4 | Draft a detailed plan of a fully furnished living room along with all the elevations. |
| 5 | Prepare a completely formatted portfolio of a design project containing furnished plans, sections and elevations |

**Learning Resources:**

**Text Books:**

| SN | Author | Title | Publisher |
|---|---|---|---|
| 1 | George Omura | Mastering Auto cad 2000 | BPB publication |
| 2 | Beverly L. Kirkpatric & James M. Kirkpatric | Auto cad for Interior Design and space planning using Auto cad 2005 | Pearson Education Inc, |
| 3 | Autocad 2004 | Santhi Marappan & others | Reference guide CADD center |

**Programme :** Diploma Programme in Interior Design and Decoration (ID).
**Course :** Basic Professional Practice. **Course code :** 1267
**Prerequisite :** Nil

**Teaching & Examination Scheme:**

| Teaching Scheme | | | | Examination Scheme | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Hrs / week | | | Credits | TH Paper Hrs. | Marks | | | | | | |
| TH | TU | PR | | | | TH | TEST | TH+TEST | PR | OR | TW | TOTAL |
| -- | -- | 04 | 04 | -- | Max. | -- | -- | -- | -- | -- | 50 | 50 |
| | | | | | Min. | -- | -- | -- | -- | -- | 20 | -- |

**Rationale:**

This course intends the student to understand professional and practical aspects of Interior design through guest lectures & workshops; Market surveys; and Case studies & Site visits related to courses of second semester.

**Objectives:**

The student will be able to

1. Gain first-hand experience in aspects of workshops, Market Surveys, Case studies and Site Visits related to courses of second Semester.

**Laboratory Work:**

| SN | List of Practicals: |
|---|---|
| | **Organize Guest Lectures & prepare a report on:** |
| 1 | Water supply, |
| 2 | Sanitation and Drainage; |
| 3 | Electrical & lighting; |
| 4 | Natural heating, ventilation & conditioning of Air |
| 5 | Conduct Demo/Workshops on Carpentry; Concepts of structural framing; Indoor fountain making; Mural making; Ceramics; . |
| | **Market surveys conducted in groups on types, availability, sizes, rates of materials such as:** |
| 6 | General Hardware and decorative fittings & fixtures required for doors, windows, shutters |
| 7 | Specialty fittings and fixtures for primary services |
| | **Case Studies & Site visits conducted individually from design, construction and primary services point of view.** |
| 8 | Small-scale Residential |
| 9 | Commercial Interiors |

**Programme :** Diploma Programme in Interior Design and Decoration (ID).
**Course :** Interior Design. **Course code :** 1268
**Prerequisite :** Nil

**Teaching & Examination Scheme:**

| Teaching Scheme | | | | Examination Scheme | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hrs / week | | | Credits | TH Paper Hrs. | Marks | | | | | | | |
| TH | TU | PR | | | | TH | TEST | TH+TEST | PR | OR | TW | TOTAL |
| 02 | -- | 06 | 08 | 06 | Max. | 80 | 20 | 100 | -- | 25 | 25 | 150 |
| | | | | | Min. | 32 | -- | 40 | -- | 10 | 10 | -- |

**Rationale:**

The course intends to apply Basic Design taught in first semester. It will also develop the skills in planning of residential and small commercial spaces with appropriate usage of materials, Basic Construction and Primary services required for the design project.

**Objectives:**

The student will be able to

1. Design Interiors for small-scale**:**
2. Residential premise (Upto 75 sqm area)
3. Commercial premise (Upto 85 sqm area)

**Contents:Theory**

| Topic No. | Topic & Subtopic | Hours | Marks |
|---|---|---|---|
| **1** | **Interior Design & Decoration**<br>Residential Project (up to 75 sqm area) | **16** | |
| | 1.1 Instructions regarding design brief | 04 | 10 |
| | 1.2 Relevant aspects**:**Basic design, Materials, Construction, Services. | 04 | 10 |
| | 1.3 Instructions regarding case studies, observations &analysis | 04 | 10 |
| | 1.4 Personal interpretations manifested through client profile and requirement framing | 04 | 10 |
| **2** | Commercial Project (up to 85 sqm area) | **16** | |
| | 2.1 Instructions regarding design brief | 04 | 10 |
| | 2.2 Relevant aspects**:**Basic design, Materials, Construction, Services. | 04 | 10 |
| | 2.3 Instructions regarding case studies, observations & analysis | 04 | 10 |
| | 2.4 Personal interpretations manifested through client profile and requirement framing | 04 | 10 |
| | **Total** | **32** | **80** |

**Laboratory Work:**

| SN | List of practicals: |
|---|---|
| 1 | Interior design of small-scale residential premise upto 75 sqm area such as Hotel Guest room; Studio Apartment; Hotel Suite; One room, Kitchen flat; One Bedroom, Hall, Kitchen apartment; Hostel room; . |
| 2 | Interior design of small-scale commercial premise upto 80 sqm area such as Fast food joint; Clinic; Boutique; Travel agency; Design studio; . (With Technical drawings for Plumbing and Electrical layout) |

**Learning Resources:**

**Text Books:**

| SN | Author | Title | Publisher |
|---|---|---|---|
| 1 | Thames & Hudson | Living large in small spaces | Thames & Hudson |
| 2 | New small homes | Aurora Cuito | Loft Publications. S. L. |
| 3 | Ruth Prett | The Ultimate Interior designer | Ward Lock |
| 4 | Stephen Crafti | Making the most of small spaces | Images Publishing group. Pvt. Ltd |
| 5 | James Grayson Trulove | Studio Apartments | James Grayson Trulove |

**Programme :** Diploma Programme in Interior Design and Decoration (ID).
**Course :** Basic Construction. **Course code :** 1269
**Prerequisite :** Nil

**Teaching & Examination Scheme:**

| Teaching Scheme | | | | Examination Scheme | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hrs / week | | | Credits | TH Paper Hrs. | Marks | | | | | | | |
| TH | TU | PR | | | | TH | TEST | TH+TEST | PR | OR | TW | TOTAL |
| 03 | -- | 04 | 07 | 03 | Max. | 80 | 20 | 100 | -- | -- | 50 | 150 |
| | | | | | Min. | 32 | -- | 40 | -- | -- | 20 | -- |

**Rationale:**

The course intends to equip the students with thorough knowledge of simple structure methods of assembly and joinery for understanding the construct simple furniture items, components of building like windows, doors and floors often used and handled by the designer in designing Interior spaces.

**Objectives:**

The student will be able to select

1. Appropriate structures, their systems, elements & the fundamentals of load transfer
2. Appropriate joinery to be used while designing furniture items.
3. Appropriate method to create stable constructed furniture items & also detailing the same.
4. Appropriate type of doors & windows with different material use and detailing the same as per the requirements in Interior spaces.
5. Techniques of laying various floor finishes & erecting, installing the structural floor.

**Contents:Theory**

| Topic No. | Topic & Subtopic | Hours | Marks |
|---|---|---|---|
| 1 | **Structures & Building Components**<br>Basic Types of Structures<br>1.1 Structures existing in Nature Man made structures Load bearing, Framed, Tensile, Shell Structures<br>1.2 Components &Elements of Building Foundations, Footings, Columns, Beams, Plinth, Slabs, floors, structural and non-structural alls, fenestrations (Doors, Windows, Ventilators and openings), Lintels, Arches, Staircase.<br>1.3 Bricks - Study types of Bricks<br>Bricks Masonry - Types of Brick Bonds in 1/2 brick thick, 1 brick thick only, Header Bond, Stretcher Bond, English & Flemish Bonds Brick Piers & Foundation Stone<br>Masonry - Basic Stone Masonry & Foundation.<br>Random Rubble, polygonal, Dry Rubble, Foundations<br>1.4 Lintels & Arches<br>Lintels - Types of Lintels (Wooden, Steel, R. C. C) R. C. C<br>Weather-shed (Different types of Chajjas & awnings) | 22 | 32 |

| Topic No. | Topic & Subtopic | Hours | Marks |
|---|---|---|---|
| | Arches - Types of Arches, Classification according to centre, shape.<br>1.5 Floors<br>Concept and Technique of Structural framing for Loft, Mezzanine, Floors, Cavity & False Floor.<br>1.6 Floorings<br>Methods (Concepts, Specifications, Provisions, Care, Process) of laying natural & artificial materials on existing slab, floor and flooring.<br>Tiles- Mosaic, Ceramic, Stone<br>(Granite, Marble) Tile on Tile, Junctions, Patterns, Inlay. | | |
| 2 | **Joinery**<br>2.1 Teakwood Joinery Study of material specific limitations of joinery Types of Joints (Lengthening, Widening Bearing Framing) Plywood Joints, Types of Plywood joints | 06 | 08 |
| 3 | **Doors & Windows**<br>3.1 Frames &Casing TW, MS, Stone**:**Door & Window Frame, types, erecting, terms involved<br>3.2 Doors<br>Modes of operation, types, Panelled door, Flush door, Glazed door Folding door, Sliding door, sliding cum folding door, pivoted, Misc. doors, miscellaneous doors such as collapsible gate, safety doors, rolling shutter.<br>3.3 Windows<br>Modes of operation and types, TW Window, MS Window, Aluminum window, Louvered window, Ventilators/ Fan lights, Protective Grills. | 12 | 28 |
| 4 | **Simple Furniture Items**<br>4.1 TW Furniture<br>Simple framed furniture items (stool, chair, table. )<br>4.2 Plywood Furniture<br>Simple Items (stool, chair, table. ) | 08 | 12 |
| | **Total** | **48** | **80** |

| SN | List of practicals: |
|---|---|
| | To be carried out in a journal-form on large size square grid pad or drawn to scale on A1 size drawing |
| | **Prepare in graphical form using any material-media such as pictures, photographs, cuttings, etc. or draw neat and proportionate sketches to explain:** |
| 1 | Types of structure, components & elements of built structure. |
| 2 | Brick & stone masonry, openings & projections |
| 3 | Lintels, arches, jambs, frames & casings |
| 4 | Types of joints<br>Lengthening such as Simple scarf, Butt, Lap, Tabled.<br>Widening such as Butt, Rebate, Tongue & Groove.<br>Bearing such as Housing, cross-lap, Halving, Dovetail & Rabbet.<br>Framing such as Tenon & Mortise, Dovetail. |
| | **Prepare to-the-scale drawings consisting of plans, elevations, sections, details, etc.** |
| 5 | Given a key plan of any Interior Premises - Flooring layout consisting of patterns by varying different materials in different areas showing details of junctions. |
| 6 | Panelled Door- details of joinery, details of panels, mouldings |
| 7 | Sliding - Folding doors:Details of fittings, operations and installation methods |
| 8 | TW Casement Window:Details of joinery, details of mouldings. |
| 9 | Pivoted TW Sash Window**:**Details of joinery, mouldings, sash bars, sash frame, beadings |
| 10 | Aluminum sliding windows (2, 3, 4 track)**:**Details of fittings, sections available, installation methods. Different provisions to be made for Mosquito net, Exhaust fans, A. C. |
| 11 | Wood furniture ANY ONE(Stool, Chair, Divan, settee. ) |
| 12 | Plywood furniture ANY ONE (side table, puffy. ) |

**Learning Resources:**

**Text Books:**

| SN | Author | Title | Publisher |
|---|---|---|---|
| 1 | R. Barry | The construction of Building Vol. I | ELBS Publication |
| 2 | R. Barry | The construction of Building Vol. Ii | ELBS Publication |
| 3 | R. Barry | The construction of Building Vol. IV | ELBS Publication |
| 4 | S. P. Arora & Bindra | Text book on Building | Dhanpat Rai & Sons |
| 5 | Rangwala S. C | Building Construction | Charottar Pub, Anand |
| 6 | B. C. Punmia | Building construction | Laxmo Publication |
| 7 | Sushil Kumar | Building construction | Laxmo Publication |
| 8 | Francis D. K. Ching | Building Construction I | illustrated Van Nortrand |
| 9 | D. A. C. A. Boyne | Architects' Working Detail Vol. I to V | The Architectural Press Ltd. London |

# LEVEL -3

## ALLIED COURSES

**Programme :** Diploma Programme in Interior Design and Decoration (ID).
**Course :** Secondary Services. **Course code :** 1316
**Prerequisite :** Nil

**Teaching & Examination Scheme:**

| Teaching Scheme | | | | Examination Scheme | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hrs / week | | | Credits | TH Paper Hrs. | Marks | | | | | | | |
| TH | TU | PR | | | | TH | TEST | TH+TEST | PR | OR | TW | TOTAL |
| 04 | -- | -- | 04 | 03 | Max. | 80 | 20 | 100 | -- | -- | -- | 100 |
| | | | | | Min. | 32 | -- | 40 | -- | -- | -- | -- |

**Rationale:**

The course intends to equip the students with concepts and principles of Ventilation and Air-conditioning, Acoustics, Safety and Security systems, Telecommunication and LAN. It will also develop the analytical skills in designing appropriate services layout.

**Objectives:**

The student will be able to

1. Apply concepts of Secondary Services.
2. Use appropriate resources including optimization.
3. Design layouts for services

**Contents: Theory**

| Topic No. | Topic & Subtopic | Hours | Marks |
|---|---|---|---|
| 1 | **Heat and Sound**<br>1.1 Principles of heat and effects of heat, Purpose of thermal insulation, advantages of insulation, general principle of thermal insulation and modes of insulation.<br>1.2 Introduction of Sound and properties and propagation of Sound, Types of Sound and effects, objective of Acoustics Terminologies. Sound intensity level based on decibels (Desirable and undesirable of sound)<br>1.3 Strengthening of sound, insulating, and elimination of sound. Defects of sound.<br>1.4 Applications: Strengthening of sound, Insulating, and elimination of sound for various activity spaces such as Sound recording studio, Conference hall, Open office and small auditorium.<br>1.5 Suggesting Acoustical arrangement for given layout along with sectional elevations. | 15 | 18 |

| Topic No. | Topic & Subtopic | Hours | Marks |
|---|---|---|---|
| 2 | **Mechanical Ventilation and Air conditioning**<br>2.1 Principles of ventilation**:** Mechanical Ventilation, Principles of Ducting and distribution for ventilation and conditioned air. Types of Fans**:** propeller, Auxiliary. Mechanical modes of ventilation<br>2.2 Principles of Air conditioning, Refrigeration Cycle<br>2.3 Systems of Air-conditioning **:** Non-ductable and ductable<br>**Nonductable:**<br>window unit,<br>Split Ac's**:** Floor, wall, ceiling mounted. Split ductable,<br>**Ductable:** Split, Packaged Unit – Air-cooled Duct<br>Floor standing Packaged unit-Air-cooled, water-cooled.<br>Central air-conditioning, DX systems, Chilled water systems according to criteria of Volumetric load, occupancy and various activities.<br>2.4 **Applications:** according to various criteria of Volumetric load, occupancy and various activities.<br>2.5 Air-conditioning layout for given interior plan along with distribution, ducting & calculating sizes. | 26 | 32 |
| 3 | **Communication Systems**<br>3.1 Types of communication telephone, EPABX, Wifi. Different types of telecommunication equipments<br>3.2 LAN, WAN systems, Installation norms.<br>3.3 Making LAN layout for given interior layout along with legend | 08 | 12 |
| 4 | **Safety and Security Systems**<br>4.1 Introduction to fire triangle and causes of fire. Fire prevention and Fire alarm systems**:** such as proprietary, central system, Auxiliary, Remote station system.<br>4.2 Fire detection**:** such as smoke detectors, heat detectors, flame detectors and their installations norms.<br>4.3 Systems for suppression of fire (i. e. Dry risers, Wet Risers, sprinklers. ) and their installation norms. Systems for fire extinguishers; Dry chemical powders, Co2, water type, and their installation norms. Fire retarding treatments such as coating, adding of fibres<br>4.4 Introduction and principles of security (as per situations) Types of security systems, field devices such as switches, sensors, card-readers, locks, cameras etc. Access controls Installation norms, Uses and applications.<br>4.5 Making security layout for interior. | 15 | 18 |
| | **Total** | **64** | **80** |

**Learning Resources:**
**Text Books:**

| SN | Author | Title | Publisher |
|---|---|---|---|
| 1 | Madan Mehta & James Johnson | Architectural Acoustics, Principles and Design | Library of congress Cataloguing in Publication Data |
| 2 | Frank and John Walk | Noise and vibration | British Library Cataloguing in Publication Data |
| 3 | Norbert Lechner | Heating, cooling, Lighting Design | Library of congress Cataloguing in Publication Data |
| 4 | Donald Hoff | Building services and equipments | Library of congress Cataloguing in Publication Data |
| 5 | Ernest Tricomi | ABC of Air conditioning | D. B. Taraporevala & sons |

**Programme :** Diploma Programme in Interior Design and Decoration (ID).
**Course :** Allied Materials and Products. **Course code :** 1317
**Prerequisite :** Nil

**Teaching & Examination Scheme:**

| Teaching Scheme | | | | Examination Scheme | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Hrs / week | | | Credits | TH Paper Hrs. | Marks | | | | | | |
| TH | TU | PR | | | | TH | TEST | TH+TEST | PR | OR | TW | TOTAL |
| 04 | -- | -- | 04 | 03 | Max. | 80 | 20 | 100 | -- | -- | -- | 100 |
| | | | | | Min. | 32 | -- | 40 | -- | -- | -- | -- |

**Rationale:**

The knowledge of allied materials and products shall help the learner to enable their use, through methods of construction, for designing Interior spaces. The knowledge of such allied materials & products along with various construction techniques & knowledge of services enable students to achieve desired design outcome.

**Objectives:**

The student will be able to select

1. Glass finishes & treatments based on the application & use.
2. Metals & Alloys based on properties and requirements
3. Polymers & Composites based on properties and requirements
4. Paints, varnishes, polishes & coatings based on properties & requirements.
5. Specialty materials based on their properties & requirements.

**Contents: Theory**

| Topic No. | Topic & Subtopic | Hours | Marks |
|---|---|---|---|
| 1 | **Glass**<br>1.1 Types, Quality and Properties.<br>1.2 Post processing of glass such as etching, acid washing, toughening, staining, bending, edge polishing, film application (sun control and decorative). | 10 | 12 |
| 2 | **Metals & Alloys**<br>2.1 Type, Quality & Properties of Metals and Alloys<br>2.2 Uses of Ferrous Metals such as Cast iron, Wrought iron, Mild steel, High carbon steel. (04)<br>2.3 Uses of Non- Ferrous Metals and Alloys such as Aluminium, Copper, Zinc, Brass, Stainless steel.<br>2.4 Processing on metals such as Buffing, Plating, Anodising, Coating (Powder & Plastic), and Galvanizing. (*Not for examination)* | 12 | 14 |
| 3 | **Polymers & Allied Composites**<br>3.1 Type, Quality & Properties of Plastics<br>3.2 Uses of thermo-set and thermo-plastics such as Nylon, Acrylic, PVC, Poly-butylenes, Poly-Urethanes.<br>3.3 Uses of composites such as Polycarbonates, Glass reinforced plastic, Fibre reinforced plastic and Metal reinforced plastic. | 10 | 16 |

| Topic No. | Topic & Subtopic | Hours | Marks |
|---|---|---|---|
| 4 | **Paints**, **Varnishes**, **Polishes & Coatings**<br>4.1 Constituents (Pigment, Thinner. ) and classification (Water, Oil, acrylic based).<br>4.2 Types (lime wash, distempers, acrylic emulsion, metallic, textured. ), Textural quality (Matt, Gloss, Satin, Lustre. ) and properties.<br>4.3 Process of painting (preparation of surface, primer coat. ) & application of paint with brush, roller, spray.<br>4.4 Application of paints on old, new and different surfaces.<br>4.5 Constituents, Types & uses of Varnishes, Polishes & Coatings (French, Melamine, Lacquer, Polyurethane) | 14 | 20 |
| 5 | **Specialty Materials**<br>5.1 Furnishing Materials-Types, Sizes and uses of Curtains, Screens and Blinds, Types, Sizes and uses of Cushioning (Coir, Foam, Rubber. ) and Upholstery materials<br>5.2 Waterproofing Materials - Applications of Waterproofing materials such as Bitumen, Mastic asphalt, Asphalt sheets, Waterproofing powder, Gels and Liquids<br>5.3 Insulating materials - Types, Quality and properties of Thermal insulation and Sound insulation materials in granular, fibrous, rolled, sheeting and panel forms<br>Uses of Sound insulating and Thermal insulating materials such as sand, PU beads, Glass wool, Rock wool, Foam, Thermacol, Cork, Quilt, Jute, Coir, Particleboard, Hollow bricks. | 16 | 16 |
| 6 | **Eco Friendly Materials**<br>2.5 Type and applications of eco-friendly materials such as bamboo, jute, cork, terracotta etc. | 02 | 02 |
| | **Total** | **64** | **80** |

**Suggested Instructional Strategies :**

Lecture method, Use of teaching aids, Case Studies, Group discussions & Assignments

**Learning Resources:**

**Text Books:**

| SN | Author | Title | Publisher |
|---|---|---|---|
| 1 | M. V. Naik | Building Construction materials | Nirali Publication |
| 2 | D. N. Ghosh | Materials of constructions | Tata McGraw Hill |
| 3 | Gurucharan Singh | Building Materials | Standard Pub, & Dist |
| 4 | S. C. Rangawala | Engineering Materials | Charottar Pub. Anand |
| 5 | K. P Roy Choudhary | Engineering Materials | Oxford Press, New Delhi |
| 6 | S. C. Rangawala | Water Supply & Sanitary Engineering | Charottar Pub. Anand |
| 7 | William Rupp | Construction Materials of Interior Design | Whitney Library |

**Programme :** Diploma Programme in Interior Design and Decoration (ID).
**Course :** Estimating and Management. **Course code :** 1318
**Prerequisite :** Nil

**Teaching & Examination Scheme:**

| Teaching Scheme | | | | Examination Scheme | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Hrs / week | | | Credits | TH Paper Hrs. | Marks | | | | | | |
| TH | TU | PR | | | | TH | TEST | TH+TEST | PR | OR | TW | TOTAL |
| 03 | -- | 02 | 05 | 04 | Max. | 80 | 20 | 100 | -- | 50 | 50 | 200 |
| | | | | | Min. | 32 | -- | 40 | -- | 20 | 20 | -- |

**Rationale:**

The course intends to enable students to learn Office management aspects of Interior Designing as a Profession. The course also intends to make them aware of current practices along with codes of conduct required to encompass skills and techniques of handling residential, commercial and tendered.

**Objectives:**

The student will be able to**:**

1. Standardized units, modes of measurement of materials, labour & items of work
2. Codes of conduct for ethical practice of interior design profession.
3. Present practices such as Tendering and Contracting.
4. Various functions carried out in an interior designers office.
5. Management, administration of 'design & execution' aspect of an interior project.

**Contents: Theory**

| Topic No. | Topic & Subtopic | Hours | Marks |
|---|---|---|---|
| 1 | **Estimating, Costing & Analysing Rates**<br>1.1 Introduction to concepts of guesswork, estimation, costing & rate analysis. Need for estimating, costing & rate analysis. (02)<br>1.2 Components of estimation, costing & analysing rates (Drawings & specifications, units & modes of measurements, work out put, material & labour cost, contingencies, profit margins, indirect costs).<br>1.3 Methods of estimating (lump-sum, work specific, area of use, per number of user, day-work, item-rate); costing (percentage basis, item rate basis) & rate analysis (Primarily item rate basis) | 12 | 20 |
| | **Tender & Tendering**<br>2.1 Introduction & Definitions*(Not for examination)*<br>2.2 Tendering Procedure: Tender Document Preparation, Types of Invitations (Public Notice, Private Invitation, Negotiation) Floating of Tender, Opening and award of tender<br>2.3 Aspects of Tender: Units of measurement & modes of measurement; Specifications of raw materials; Specifications and Schedule writing. *(Not for examination)*<br>2.4 Contents of Tender Document: Undertaking from Contractor, | 12 | 20 |

| Topic No. | Topic & Subtopic | Hours | Marks |
|---|---|---|---|
| | Pre-qualification of tender, General conditions of tender, Bill of Quantities, General Specifications, Material specification, Special Specification, Set of working drawings | | |
| | 2.5 Contractual Procedures: Work order letter and acceptance letter, Interim bills and final bills, Bills certifications | | |
| | **Career Opportunities & professional ethics**<br>3.1 Entering the Profession *(Not for examination)*<br>3.2 Avenues for professional practice including advantages and limitations (04) Codes of conduct and responsibility towards client, fellow professionals, profession, contractors, suppliers, other consultants and the society<br>3.3 Professional Ethics*(Not for examination)*<br>3.4 Codes of conduct and responsibility towards client, fellow professionals, profession, contractors, suppliers, other consultants and the society. | 06 | 08 |
| | **Office & project management**<br>4.1 Working of Interior Design Studio & ideal office structure; Distribution of work, authority, duties & responsibilities, Reporting.<br>4.2 Work ethics: Acts applicable; Basis for Professional Fees & Scales of fees;<br>4.3 Physical workplaces in the office; Accounting, maintenance of book of accounts and records<br>4.4 Basic principles of management and application to interior designing projects<br>4.5 Introduction to Bar Charts, Gantt Chart, PERT/ CPM | 18 | 32 |
| | **Total** | **48** | **80** |

| SN | List Of Practical |
|---|---|
| | To be carried out on A-4 size white papers well composed & presented in a booklet form |
| | Design, draw neat and proportionate sketches & workout: |
| 1 | Cost of 2 residential furniture (1 each of shelves & storages, seats, tables & bed) |
| 2 | Estimate of 2 commercial furniture (1 each of displays & storages, seats & seating, worktops & counters) |
| 3 | Specification for 1 non-structural masonry installations & 1 speciality panelling & partitions. |
| 4 | Specification for flooring in a living room & false-ceiling for a conference room |
| 5 | Rate analysis for any knockdown/modular furniture |
| | Prepare: |
| 6 | A set of item rate tender for any one residential or commercial project |
| 7 | A Bar chart for the works. |

**Learning resources:**

**Text Books:**

| SN | Author | Title | Publisher |
|---|---|---|---|
| 1 | Roshan Namavati | Professional Practice (Estimation & Valuation) | Lakhani Book depot |
| 2 | Roshan Namavati | Architectural Detailing | Lakhani Book depot |
| 3 | Christine M Pitrowski | Professional Practice in | Van Nostrand Reinhold |
| 4 | Harry Siegel, CPA, Alan, Sigel | A Guide to Business Principle and Practices for Interior | Whitney library of Design |
| 5 | William R. Hall | Contract Interior Finishes | Whitney library of Design |

# LEVEL -4

## APPLIED TECHNOLOGY COURSES

**Programme :** Diploma Programme in Interior Design and Decoration (ID).
**Course :** Seminar. **Course code :** 1411
**Prerequisite :** 65 Credits

**Teaching & Examination Scheme:**

| Teaching Scheme | | | | Examination Scheme | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hrs / week | | | Credits | TH Paper Hrs. | Marks | | | | | | | |
| TH | TU | PR | | | | TH | TEST | TH+TEST | PR | OR | TW | TOTAL |
| -- | -- | 02 | 02 | -- | Max. | -- | -- | -- | -- | | 50* | 50 |
| | | | | | Min. | -- | -- | -- | -- | | 20 | -- |

* Indicates TW to be assessed by external and internal examiners.

**Rationale:**

An engineering technician has to face number of problems / situations in his professional life and he has to convey his ideas through presentation.

Knowledge of scientific way of solving the problems and increase ability to apply it, to find alternative solutions for solving such problems will help a technician in his professional life.

The involvement of student in the seminar and project work will help him to develop this competency, combine the theoretical and practical concepts studied into useful applications, develop planning and execution skills and perform analyzing and trouble shooting of their respective seminar and project, develop skills in interacting with others, to work in team, search for obtaining the information and materials from number of sources and present the work in neatly documented report and present.

**Objectives:**

The student will be able to

1. Develop the skill to identify the problem and develop the attitude to take scientific steps to find solutions to the problems.
2. Develop skills to communicate the problems and solutions.
3. Develop abilities to work in team and act as leader of seminar and project
4. Develop planning, execution skills.
5. Develop analyzing and trouble shooting abilities.
6. Develop skills to prepare reports.
7. Develop presentation skills.
8. Develop analyzing and trouble shooting abilities.
9. Understand and Implement recent developments in engineering fields.

**Contents:**

| Activity No | Activities |
|---|---|
| 1 | Search from various locations and select at least three seminar titles |
| 2 | **Review:1:Selection of Topic for Seminar:Discussion in class as class group** |
| 3 | Preparation of Seminar Diary for noting progress |
| 4 | Collection of data for seminar from:internet / visit / Journals / Literatures |
| 5 | **Review:2** |
| 6 | Preparation of document:Initial Draft:prints from various soft sources / Xerox from various hard sources |
| 7 | **Review:3** |
| 8 | Organisation of data collected (draft) |
| 9 | **Review:4:Approval by Guide** |
| 10 | Preparation of document (Printed) |
| 11 | **Review:5:Approval by Guide** |
| 12 | Seminar Planning |
| 13 | Preparation of presentation document:Use of various methods |
| 14 | **Review:6** |
| 15 | Submission of Seminar and presentation document:Hard copy & Soft copy |
| 16 | Presentations of Seminar |
| | **Total** |

**Areas for selection of seminar:**
**Programme:Interior Design and Decoration:**

| SN | Areas For Selection |
|---|---|
| 1. | Materials and products for interior |
| 2. | Primary services |
| 3. | Secondary services |
| 4. | Walk through |
| 5. | Basic construction |
| 6. | Interior construction techniques |
| 7. | Advanced interior design |
| 8. | Computer application in Interior Design and Decoration |
| 9. | Advanced materials used in Interior Design and Decoration industries. |
| 10. | Advanced machineries and equipment used. |
| 11. | Topics related to Interior Design and Decoration |

**Guidelines for Seminar:**

1. **Selection of topic for seminar:**
   a. The student shall search various resources and get the topic approved in class.
   b. Topic of seminar should not be from programme curriculum
   c. Topic of seminar should not be from the project taken by the group or by individual.
   d. Selection of topic should be finalised in consultation with teacher guide allotted for the seminar.

2. **Submission of Seminar Document:**
   a. The student shall get the seminar draft approved from Guide and complete final document.

b. Each student shall prepare three copies of final seminar document and retain one copy with student and submit two copies to the institute stating on one copy "For Library" and on another copy as for "Interior Design and Decoration Department".
c. The structure of the seminar document shall be as per the following format: Certificate / Acknowledgement / index / introduction / detailed content / conclusion / references. The photos, charts, animations, certificates from supporting agencies.
d. Modify format suitably as per requirement of the seminar.
e. The seminar report shall be of minimum 10 pages and max. 20 pages with 1.5 line spacing. Font: Tahoma, left margin 3 cm, right margin 1.5 cm, top margin 2 cm, bottom margin 2 cm, header & footer 1.5 cm, page numbers, size of font 12 pt, paragraphs left and right justified. It should be certified by seminar guide and head of department.

**3. Evaluation of Seminar:**
**Evaluation of seminar will consist of Progressive Assessment, Presentation**

**i. Progressing Assessment:**

1. Progressive assessment will be based on attendance, searching of various seminar topics, selection of title, collection of data from internet, Journals, Literatures, organization of data and preparation of document.
2. The student has to get seminar document assessed from guide regularly.
3. Head of department will sign once in a month.
4. The attendance of the student shall carry 05 marks as follows
    a. Below 75 % : 00 marks
    b. 75 % and below 80 % : 02 marks
    c. 80 % and below 85 % : 03 marks
    d. 85 % and below 90 % : 04 marks
    e. 90 % and above : 05 marks

**ii. Presentation of Seminar:**

1. The time for presentation shall be 7 to 10 minutes per student
2. the question answer session time shall be 2 to 3 minutes per student
3. Evaluation of presentation of seminar will be carried out by a panel of at least three teaching staff from institute based on the following point
    a. Confidence and courage
    b. Technical knowledge achieved
    c. Presentation skill
    d. Use of AV aids, PPT, Models, Charts, OHP, Cutouts

**iii. Marking scheme for Seminar.**

| Progressive assessment | Confidence and courage | Technical knowledge achieved | Presentation skill | Use of AV aids | Total |
|---|---|---|---|---|---|
| 25 | 05 | 05 | 10 | 05 | 50 |

**Programme :** Diploma Programme in Interior Design and Decoration (ID).
**Course :** Project. **Course code :** 1412
**Prerequisite :** 65 Credits

**Teaching & Examination Scheme:**

| Teaching Scheme | | | | Examination Scheme | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Hrs / week | | | Credits | TH Paper Hrs. | Marks | | | | | | |
| TH | TU | PR | | | | TH | TEST | TH+TEST | PR | OR | TW | TOTAL |
| -- | -- | 02 | 02 | -- | Max. | -- | -- | -- | -- | 50 | 50* | 100 |
| | | | | | Min. | -- | -- | -- | -- | 20 | 20 | -- |

* Indicates TW to be assessed by external and internal examiners.

**Rationale:**

An engineering technician has to face number of problems / situations in his professional life and he has to convey his ideas through presentation.

Knowledge of scientific way of solving the problems and increase ability to apply it, to find alternative solutions for solving such problems will help a technician in his professional life.

The involvement of student in the seminar and project work will help him to develop this competency, combine the theoretical and practical concepts studied into useful applications, develop planning and execution skills and perform analyzing and trouble shooting of their respective seminar and project, develop skills in interacting with others, to work in team, search for obtaining the information and materials from number of sources and present the work in neatly documented report and present.

**Objectives:**

The student will be able to

1. Develop the skill to identify the problem and develop the attitude to take scientific steps to find solutions to the problems.
2. Develop skills to communicate the problems and solutions.
3. Develop abilities to work in team and act as leader of seminar and project
4. Develop planning, execution skills.
5. Develop analyzing and trouble shooting abilities.
6. Develop skills to prepare reports.
7. Develop presentation skills.
8. Develop analyzing and trouble shooting abilities.
9. Understand and Implement recent developments in engineering fields.

**Contents:**

| Activity No | Activities |
|---|---|
| 1 | Formation of Group |
| 2 | Selection of Project:Individual Group discussions |
| 3 | Submission of synopsis:by each group |
| 4 | Project activity plan |
| 5 | Preparation of Project Content in Diary |
| 6 | Visits to Industries / Institutions / Market |
| 7 | Collection of Data / Survey / Analysis and Presentation |
| 8 | Design of Components and preparation of drawing:its checking |
| 9 | Progressive presentation of work completed should be noted in Project Diary |
| 10 | Presentation of initial draft:pre submission draft |
| 11 | Final Project Report:Printed:Submission:soft copy & Hard copy |

**Areas for selection of project:**

**Programme:Interior Design and Decoration:**

| SN | Areas For Selection |
|---|---|
| 1. | Allied materials and products |
| 2. | Basic construction |
| 3. | Advanced interior design. |
| 4. | Specialty interior design |
| 5. | Landscape design |
| 6. | Set design |
| 7. | Primary services |
| 8. | Any other advanced topic related to Interior Design and Decoration |

**Suggested Instructional Strategies:**

Classroom Teaching, Industrial visit, Library Assignment, Home Assignment, Group Discussion, Case Studies.

**Learning Resources:**

Magazines, Journals, Papers:National & international:New building construction world, Inside outside, Better interior, Architecture and design, Indian concrete journal.
Reference Books, Internet, Previous projects, Text Books, Codes of Practices e. g. IS Codes, Video Cassettes, Audio Cassettes, Compact Discs, Charts, Transparencies, Software, Models, Industrial visits

**Guidelines for Project:**

**A. Group Formation:**

1. The department Head / Incharge should make sure that the project groups are formed within **one week** of the beginning of academic term and assign a faculty as project guide.
2. The students may be asked to work individually or in groups of maximum five students.
3. The group can decide the leader and distribute work and prepare the group management structure.

**B. Finalization of Project Title:**

1. The students are expected to take up a project with the guidance of a Project Guide from the institute / Industry Expert / Sponsored by industry, Institute, society, self.
2. The project shall be as far as possible industrial project useful to society.
3. The students can seek help from TPO / HOD / Guide.
4. The group of students / Project guide / authority shall see the viability / feasibility of project over the duration available with the students and capabilities and setup available.

**C. Note:**

1. The group / student shall prepare Project Diary with Name of Project, Name of Students in group, their attendance, and daily progress and get assessed from guide from time to time during project hours.
2. Each student shall maintain individual progressive assessment sheet and get assessed from guide from time to time during project hours.
3. The title of the project should be finalized within **two weeks** after the group formation and a synopsis of the project should be submitted to the HOD & guide.
4. The format of the synopsis shall be as follows:The synopsis should include project title, aim, and block diagram, list of components required and working.
5. Head of department will sign once in a month.
6. Modify format suitably as per requirement of the project.

**D. Project Execution:**

1. Guide shall monitor the work and help the students from time to time.
2. The progress shall be presented before the guide every week during project hours. The group shall take the signature of guide on Project Diary and Individual Progressive Assessment Sheet.
3. The students shall design parts, prepare their drawing showing all details, and manufacture within the institute / sponsoring industry / workshop in local areas.
4. The guide should maintain a record of progressive / continuous assessment of project work and observe the progress of each group member on weekly basis.
5. The same shall be kept ready for submission to the external examiner before the final examination.

**E. Evaluation of Project:**

1. The evaluation of individual progress shall be followed as per the chart given.
2. External examiner and guide shall jointly evaluate the project.
3. The project can be evaluated on site if it is difficult to bring or demonstrate the trials in the institute
4. The attendance of the student shall carry 05 marks as follows
    i. Below 75 % :00 marks
    ii. 75 % and below 80 % :02 marks
    iii. 80 % and below 85 % :03 marks
    iv. 85 % and below 90 % :04 marks
    v. 90 % and above :05 marks

**F. Project Report:**

1. The student shall get the initial draft copy of the project approved from the Project Guide.
2. Structure:It shall be as follows
    - First page, Institute Certificate, acknowledgment, Certificate from industry, Index, Introduction, objectives of the project, scope of the project, methodology used, Design Drawing of the part and assembly, Costing, Advantages Disadvantages, Bibliography / sources of data collected / Industries visited / Experts interviewed.
    - Various designed part and assembly drawings, photographs, charts, statistical data, result data and conclusions.
    - Future developments possible.
    - CD of video clips / photos / Power Point presentation / expert's comments
3. Each group has to submit one copy of project report to the library and one copy to the department apart from the individual copy.
4. The project report will be of 40 to 50 pages with 1. 5 line spacing. Font:Tahoma, left margin 2 cm, right margin 1. 5 cm, top margin 2 cm, bottom margin 2 cm, header & footer 1. 5 cm, page numbers, size of font 12 pt, paragraphs left and right justified.
5. Each student from group shall have one copy with individual certificate only.
6. The project report and progressive assessment sheets are to be submitted before the end of term declared in the Academic Calendar of the institute.

**Programme :** Diploma Programme in Interior Design and Decoration (ID).
**Course :** Interior Construction Techniques. **Course code :** 1474
**Prerequisite :** Nil

**Teaching & Examination Scheme:**

| Teaching Scheme | | | | Examination Scheme | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Hrs / week | | | Credits | TH Paper Hrs. | Marks | | | | | | |
| TH | TU | PR | | | | TH | TEST | TH+TEST | PR | OR | TW | TOTAL |
| 03 | -- | 06 | 09 | 03 | Max. | 80 | 20 | 100 | -- | -- | 50 | 150 |
| | | | | | Min. | 32 | -- | 40 | -- | -- | 20 | -- |

**Rationale:**

The intends the students to understand the constructional details of Components such as stairs, partitions, panelling and ceilings to create functional Interior spaces, surfaces or enclosures; it also incorporates the detailed construction techniques to make storage Units required to be used in Interior spaces often. The student will also be able to workout the costs of the same in order to help understand the estimation process required for project budgeting.

**Objectives:**

The student will be able to select

1. Types of stairs and staircases using different materials.
2. Appropriate type of Partitions, Panelling as per requirements.
3. Various types of ceilings.
4. Appropriate constructional details for various furniture items.
5. Work out quantities of materials, estimate the cost and do the rate analysis.

**Contents:Theory**

| Topic No. | Topic & Subtopic | Hours | Marks |
|---|---|---|---|
| 1 | **Staircase**<br>1.1 **Types of Staircases**<br>Straight, Dog legged, Half turn, quarter turn, Geometric.<br>Different Materials used in construction of stairs<br>Structural concepts and systems for designing<br>Designing of staircase<br>1.2 **Detailed Construction and Its Components**<br>Introduction to TW Stairs, MS Stairs- Structural elements, terms involved Comparison and erection. | 10 | 12 |
| 2 | **Rate Analysis:**<br>2.1 **Method of Rate Analysis**<br>Calculating correct quantities by listing out various materials used in each furniture items. Calculating wastages, contingencies, and overheads for different materials. Polishing / painting or finishing quantities Identify the type of contractors needed for job work, His ways and rates of working for labour Different options for labour rates possible and used as per the mkt. Calculating labour required, overhead charges, profit margin. Finally working out the near exact cost of any item | 06 | 08 |

| Topic No. | Topic & Subtopic | Hours | Marks |
|---|---|---|---|
| | included in Interior project Work. | | |
| 3 | **Partitions & Panelling:**<br>3.1 **Types of Teakwood & Plywood Stud Partitions:** Concepts of structural variations, types of designs, materials used, modular or Readymade partitions, method of installing, provisions for services involved.<br>3.2 **Special Types of Partitions :** Acoustical Partitions, Thermal Partitions, Modular Partitions<br>3.3 **Types of Panelling:** Concepts of structural variations, types of designs, materials used modular or Readymade panelling method of installing, provisions for services involved.<br>3.4 **Special Types of Panelling:** Acoustical Partitions, Thermal panelling, Aesthetical aspects, display panels | 14 | 32 |
| 4 | **Ceilings**<br>4.1 Concepts of structural variations, types of designs, materials used, modular or readymade, methods of installing, provisions made for services. TW & Plywood, POP, Gypsum Suspended Aluminium T section, modular, Acoustical, Metallic | 08 | 12 |
| 5 | **Storage & Display Units:**<br>5.1 Types of storages possible as per the needs. Designing guidelines, Calculating storage needs, deciding sizes, construction. Different options for Carcass, Shutters, Drawers, Shelves, Hardware, shape.<br>5.2 Surface treatments and finishing. | 10 | 16 |
| | **Total** | **48** | **80** |

**Laboratory Work:**

| SN | List of Practical: |
|---|---|
| | **Prepare in graphical form using any material-media such as pictures, photographs, cuttings, etc. or draw neat and proportionate sketches to explain:** |
| 1 | Different types of staircase- Straight Flight, Doglegged and Geometric.<br>Different materials for staircase - Metal, glass, wood etc. |
| 2 | Different types Partitions taking into consideration the height, different materials, modes of construction, framing and skin options |
| 3 | Different types of ceiling taking into consideration different levels, modes of construction, materials, framing and skin options including details of fitting different decorative elements. |
| | **Draw to scale - Plans, Elevations and Sections, including constructional details considering the given limits and parameters:** |
| 1 | A Wooden staircase. |
| 2 | A partly glazed, partly panelled, wooden framed double skinned partition with swing door considering passage for wiring through the partition Also work out the estimated cost. |
| 3 | A partly glazed, partly panelled, Aluminium framed partition with a pivot door with Floor-spring. |
| 4 | A heat insulating / acoustical partition. |
| 5 | A Decorative panelling using wooden framing to match the aesthetical appearance of walls in office reception area or Living room or Hotel lobby. |
| 6 | False ceiling made of G I framing with P O P tiles showing details of fixing spot light /mirror optic light fitting. |
| 7 | Typical detail of any ready made modular false ceiling including light fixing and framing details. |
| 8 | Dressing unit for master bedroom. Work out the estimate for the same. |
| 9 | A display cum storage divider unit between kitchen and dining room with provision for disk mounted Television and crockery and books display. |
| 10 | A Gents and Ladies wardrobe. |

**Learning Resources:**

**Text Books:**

| SN | Author | Title | Publisher |
|---|---|---|---|
| 1 | R. Barry | The construction of Building Vol. II | ELBS Publication |
| 2 | R. Barry | The construction of Building Vol. IV | ELBS Publication |
| 3 | S. P. Arora & Bindra | Text book on Building | Dhanpat Rai & Sons |
| 4 | Rangwala S. C | Building Construction | Charottar Pub, Anand |
| 5 | B. C. Punmia | Building construction | Laxmo Publication |
| 6 | Sushil Kumar | Building construction | Laxmo Publication |
| 8 | Francis D. K. Ching | Building Construction I | illustrated Van Nortrand |

**Programme :** Diploma Programme in Interior Design and Decoration (ID).
**Course :** Working Drawing. **Course code :** 1475
**Prerequisite :** Nil

**Teaching & Examination Scheme:**

| Teaching Scheme | | | | Examination Scheme | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hrs / week | | | Credits | TH Paper Hrs. | Marks | | | | | | | |
| TH | TU | PR | | | | TH | TEST | TH+TEST | PR | OR | TW | TOTAL |
| 03 | -- | 06 | 09 | 03 | Max. | 80 | 20 | 100 | -- | -- | 50 | 150 |
| | | | | | Min. | 32 | -- | 40 | -- | -- | 20 | -- |

**Rationale:**

The course intends to equip the students with thorough knowledge and skills of using advance interior construction techniques and materials for various complex furniture items and also be able to workout the costs of the same in order to help understand the estimation process required for project budgeting. This course also makes student to understand the future furniture design techniques in form of modular systems being extensively used in market now a days.

**Objectives:**

The student will be able to select

1. Appropriate system for modern kitchens used extensively in interiors.
2. Appropriate method of construction, detailing, storage, materials, soft furnishing methods required for Beds and seating systems in residential & commercial Interiors.
3. Various complex materials required for tables & counters as furniture items
4. Work out the near-to-exact quantities of various materials required and do rate analysis of material & labour required to estimate the project cost of designed Interior spaces.
5. Various modular furniture items as per requirements.

**Contents:Theory**

| Topic No. | Topic & Subtopic | Hours | Marks |
|---|---|---|---|
| 1 | **Kitchen Furniture:**<br>1.1 **In-Situ Kitchen Platform:**<br>Structure design, Construction technique, Material to be used for structure Cladding or surfacing. Provisions to be made for services like plumbing, drainage, and electrification.<br>1.2 **Fabricated and Modular Kitchen Platform:**<br>Structural frame work design, cladding and finishing, dismantling, installing.<br>1.3 **Storage Units & Kitchen Trolley Systems**<br>O. H. Storage Units (Wall mounted, suspended, cantilevered) Shelving, Hanging, rotating, sliding arrangements. Large storages, Bulk Storage, Loft Storage Modular/ Fixed Trolley systems (readymade, customized) Material effectively used for each purpose. | 10 | 20 |
| 2 | **Beds & sitting System**<br>2.1 **Beds**<br>Study the composition, material, structure, storage, shape, joinery req. for designing the beds (Single, Double, Bunk, Sofa cum Bed, modular type) with & without storage as per the needs. Study diff. types of framing, finishing materials. STD sizes (bed size, mattress, shapes)<br>2.2 **Seating**<br>Simple seats, complex seats, sofa seats, office Seats (Upholstered/ Non- Upholstered). Cushioning & Tapestry methods | 12 | 18 |
| 3 | **Tables & Counters:**<br>3.1 **Types of Tables:**<br>Studying different types of simple, large, small tables as required for Residences, offices, conferences with or without storage needs.<br>Tables made for special use (Executive Table, Reception, Staff Table, Study, Conference, and Dining) Structures necessary for large tables.<br>3.2 **Counters:**<br>Defining counters, types of counters (Bar, Bank, Ticket booking, service) To study structures, services involved, display systems, storages, ledges. Different surface finishes, accessories needed.<br>3.3 Concepts of structural variations, types of designs, materials used modular or Readymade panelling method of installing, provisions for services involved. Acoustical Partitions, Thermal panelling, Aesthetical aspects, display panels | 18 | 32 |
| 4 | **Office System & Residential Systems**<br>4.1 Study of residential as well as office systems.<br>Studying readymade furniture systems and to be customized systems also. | 08 | 10 |
| | **Total** | **48** | **80** |

| SN | list of practicals: |
|---|---|
| | **Prepare in graphical form using any material-media such as pictures, photographs, cuttings, etc. or draw neat and proportionate sketches to explain:** |
| 1 | Different types of tables, shape, structure, purpose, services, materials, Modularity |
| 2 | Different types of counter their shapes, structure, purpose, services, materials. Bar counter and all the required details (Storage for glasses, bottles. ) |
| | **Draw to scale - Plans, Elevations and Sections, including constructional / working details, workout detailed quantities & prepare estimate considering the given limits & parameters:** |
| 3 | Layout for kitchen/pantry area with storage requirements. |
| 4 | Storage in kitchen in trolley system & over head storage |
| 5 | Double bed with storage. Also prepare the cost estimation. |
| 6 | Wooden Sofa chair having loose cushions. |
| 7 | Fully upholstered sofa |
| 8 | Study Table |
| 9 | Reception Table/ Desk. |
| 10 | Executive Table |
| 11 | Office Table OR Staff Table. |
| 12 | Conference Table |
| 13 | Dining Table for six persons. |
| 14 | Bar Counter |
| 15 | Bank Counter OR Ticket Counter OR Service Counter |

**Learning resources:**

**Text Books:**

| SN | Title | Author | Publisher |
|---|---|---|---|
| 1 | Text book on Building | S. P. Arora & Bindra | Dhanpat Rai & Sons |
| 2 | Building Construction | Rangwala S. C | Charottar Pub, Anand |
| 3 | Building construction | B. C. Punmia | Laxmo Publication |
| 4 | Building construction | Sushil Kumar | Laxmo Publication |

**Programme :** Diploma Programme in Interior Design and Decoration (ID).
**Course :** 3D CADD. **Course code :** 1476
**Prerequisite :** Nil

**Teaching & Examination Scheme:**

| Teaching Scheme | | | | Examination Scheme | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Hrs / week | | | Credits | TH Paper Hrs. | Marks | | | | | | |
| TH | TU | PR | | | | TH | TEST | TH+TEST | PR | OR | TW | TOTAL |
| 01 | -- | 06 | 07 | -- | Max. | -- | -- | -- | 50 | -- | 50 | 100 |
| | | | | | Min. | -- | -- | -- | 20 | -- | 20 | -- |

**Rationale:**

The students will be able to generate a realistic view of their design. Also, communicating their ideas becomes very easy and effective.

**Objectives:**

The student will be able to use

1. 3D interface.
2. Basic modelling techniques.
3. Application on materials, maps, lights and camera.
4. Rendering and walk through.

**Contents:Theory**

| Topic No. | Topic & Subtopic | Hours |
|---|---|---|
| 1. | **Introduction To 3d Interface**<br>1. 1. Compatibility of units with other CAD software<br>1. 2. Importing and linking 2D CAD drawings | 02 |
| 2. | **main toolbar and modelling techniques**<br>2. 1. Basic primitives<br>2. 2. Extended primitives<br>2. 3. Compound object<br>2. 4. Modifiers | 04 |
| 3. | **Materials and Mapping**<br>3. 1. Standard material<br>3. 2. Two sided materials, multi sub object material<br>3. 3. Creating new materials, UVW mapping | 03 |
| 4. | **Lights and Camera**<br>4. 1. Types of light<br>4. 2. Types of camera | 02 |
| 5 | **Rendering and Walk Through**<br>5. 1. Types of rendering, Saving rendered image<br>5. 2. Concept of frames, Path animation<br>5. 3. Saving an. avi File.<br>5. 4. Introduction to other animation formats | 05 |
| | **Total** | **16** |

**Laboratory Work**

| SN | List of Practical: |
|---|---|
| 1 | Create simple furniture objects using basic primitives. (6-8 objects to be modelled) |
| 2 | Create simple furniture objects using extended primitives. (6-8 objects to be modelled) |
| 3 | Apply materials to the previously modelled furniture objects. |
| 4 | Model interiors of a living room, apply materials and assign lights and camera. |
| 5 | Create a small walk through of the model of the living room. |

**Learning Resources:**

**Text Books:**

| SN | Author | Title | Publisher |
|---|---|---|---|
| 1 | George Omura | Mastering Auto cad 2000 | BPB publication |
| 2 | Beverly L. Kirkpatric & James M. Kirkpatric | Auto cad for Interior Design and space planning using Auto cad 2005 | Pearson Education Inc. |

# LEVEL -5

## DIVERSIFIED COURSES

**Programme :** Diploma Programme in Interior Design and Decoration (ID).
**Course :** Advance Interior Design. **Course code :** 1583
**Prerequisite :** Nil

**Teaching & Examination Scheme:**

| Teaching Scheme | | | | Examination Scheme | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hrs / week | | | Credits | TH Paper Hrs. | Marks | | | | | | | |
| TH | TU | PR | | | | TH | TEST | TH+TEST | PR | OR | TW | TOTAL |
| 02 | -- | 08 | 10 | 08 | Max. | 160 | 40 | 200 | -- | 25 | 25 | 250 |
| | | | | | Min. | 64 | -- | 80 | -- | 10 | 10 | -- |

**Rationale:**

The course intends the students to develop the skills in planning of medium-scaled residential and commercial premises with appropriate usage of Allied materials & Products and application of Secondary services required for the interior design.

**Objectives:**

The student will be able to

1. Design Interiors for medium-scale commercial premise

**Contents:Theory**

| Topic No. | Topic & Subtopic | Hours | Marks |
|---|---|---|---|
| 1 | **COMMERCIAL PROJECT** (Up to 175 sqm area) | **32** | **160** |
| | 1.1 Instructions regarding design brief<br>The difference between residential and commercial design. Planning requirements of a particular commercial project. Amount of people working there,<br>Daily visitors, occasional visitors. | 08 | 40 |
| | 1.2 Relevant aspects:Basic design, Materials, Construction, Services. | 08 | 40 |
| | 1.3 Instructions regarding case studies, observations & analysis | 06 | 30 |
| | 1.4 Personal interpretations manifested through client profile and requirement framing | 10 | 50 |
| | **Total** | **32** | **160** |

| SN | List of Practical: |
|---|---|
| 1 | **Project:**Interior design of medium-scaled commercial premise Upto 175 sqm area such as<br>• Branch office of a Company or Bank;<br>• Departmental store;<br>• Polyclinic;<br>• Showroom;<br>• Restaurant;<br>• Resto-Bar,<br>• Hotel Presidential Suite;<br>• Old age home unit; .<br><br>Student should prepare following drawings:<br>- Furniture layout<br>- Sections<br>- Elevations<br>- Flooring layouts<br>- Perspective views<br>(Technical drawings for Plumbing, Electrical and Air-conditioning layout with considerations to safety and security ) |

**Learning Resources:**

**Text Books:**

| SN | Author | Title | Publisher |
|---|---|---|---|
| 1 | -- | Design 02 Residential Space-I | Juzhu Kongjan |
| 2 | -- | Design 09 Residential Space-III | Juzhu Kongjan |
| 3 | Shenzen Nanhair Art Design Co. /ed | RS 03 Residential Space-III | Juzhu Kongjan |
| 4 | Stafford Cliff | The best exhibition Stand Design2 | Roto vision Sa Switzerland |
| 5 | Vilma Barr Katherine Field | Stores:Retail Display and Design | PBC International Inc. |

**Programme :** Diploma Programme in Interior Design and Decoration (ID).
**Course :** Speciality Interior Design. **Course code :** 1584
**Prerequisite :** Nil

**Teaching & Examination Scheme:**

| Teaching Scheme | | | | Examination Scheme | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hrs / week | | | Credits | TH Paper Hrs. | Marks | | | | | | | |
| TH | TU | PR | | | | TH | TEST | TH+TEST | PR | OR | TW | TOTAL |
| 02 | -- | 08 | 10 | -- | Max. | -- | -- | -- | -- | 50 | 100 | 150 |
| | | | | | Min. | -- | -- | -- | -- | 10 | 40 | -- |

**Rationale:**

The course intends the students to develop the skills in planning of complex commercial premises with appropriate usage of Allied materials & Products and application of Secondary services required for the interior design.

**Objectives:**

The student will be able to

1. Design Interiors for complex**:**
    a. Commercial premise (Upto 250 sqm area)
    b. Commercial premise (Upto 350 sqm area)

**Contents:Theory**

| Topic No. | Topic & Subtopic | Hours |
|---|---|---|
| **1** | **Commercial Project** (Up to 350sqm area) | 32 |
| | 1.1 Instructions regarding design brief | 08 |
| | 1.2 Relevant aspects:Basic design, Materials, Construction, Services. | 08 |
| | 1.3 Instructions regarding case studies, observations & analysis | 06 |
| | 1.4 Personal interpretations manifested through client profile and requirement framing | 10 |
| | **Total** | **32** |

| SN | List of practicals: |
|---|---|
| 1 | **Project:**Interior design of complex commercial premise upto 350 sqm area such as Speciality restaurant; Five-star Hotel lobby; Exhibition pavilion; Multiplex entrance foyer / lounge; Casino / Discotheque; Post-office, Bank; Corporate Office; Office for Software, BPO; Mega store; Super market; with considerations to safety and security (With Technical drawings for Plumbing, Electrical, Air-conditioning & telecommunication layout) |

**Learning Resources:**

**Text Books:**

| SN | Title | Author | Publisher |
|---|---|---|---|
| 1 | New shop Design | Carles Broto | Arian Mostaedi |
| 2 | Exhibition Design | Rolshoven Martin | Rockport Publishers |
| 3 | Interior Design Bar and Restuarant | Jeong JI Seong ed. | Jeong JI Seong |
| 4 | Design for Shopping New Retail Interiors | Nanuelli Sara | Laurence King Publishing Ltd |
| 5 | Interior design boutique, hotel & spa (Motel & hotel) | Jeong JI Seong | Jeong JI Seong |

**Programme :** Diploma Programme in Interior Design and Decoration (ID).
**Course :** Landscape Design. **Course code :** 1585
**Prerequisite :** Nil

**Teaching & Examination Scheme:**

| Teaching Scheme | | | | Examination Scheme | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hrs / week | | | Credits | TH Paper Hrs. | Marks | | | | | | | |
| TH | TU | PR | | | | TH | TEST | TH+TEST | PR | OR | TW | TOTAL |
| 01 | -- | 04 | 05 | -- | Max. | -- | -- | -- | -- | 50 | 50 | 100 |
| | | | | | Min. | -- | -- | -- | -- | 20 | 20 | -- |

**Rationale:**

This course intends the student to understand professional and practical aspects of Interior design through guest lectures & workshops; Market surveys; and Case studies & Site visits related to courses of second semester.

**Objectives:**

The student will be able to

1. Know and utilize knowledge of landscaping & first-hand experience in aspects of workshops, nursery (plants) surveys, Case studies and Site Visits related to course.

**Contents:Theory**

| Topic No. | Topic & Subtopic | Hours |
|---|---|---|
| 1. | **Introduction To Landscaping**<br>1.1 History of Background<br>1.2 Principal of Landscape Design<br>1.3 Elements of Design | 02 |
| 2. | **Site Parameters**<br>2.1 Site Analysis<br>2.2 Site Assessment<br>2.3 Defining use area | 01 |
| 3. | **Landscape Elements & Materials**<br>3.1 Selection of plant species<br>3.2 Flowers<br>**3.3** Natural and man made landscape materials. | 04 |
| 4 | **Landscaping**<br>4.1 Exterior landscaping<br>4.2 Interior landscaping<br>4.3 Principals of interior landscape maintenance.<br>4.4 Xeri scape | 04 |
| 5 | **Design of Landscaping**<br>5.1 Site inventory<br>5.2 Design process.<br>5.3 Case studies<br>5.4 Conversion formulas | 05 |
| | **Total** | **16** |

**Laboratory Work**

| SN | List of Practicals |
|---|---|
| 1 | Organize Guest Lectures through eminent professionals for Residential & Commercial spaces; |
| 2 | Market surveys conducted in groups on types, availability, sizes, and rates of:landscape elements. |
| 3 | Case Studies & Site visits conducted individually on**:**<br>Small-scale Residential & Commercial landscape from development and primary services point of view. Design the landscape for Residential or Commercial project. |

**Learning Resources:**

**Text Books:**

| SN | Author | Title | Publisher |
|---|---|---|---|
| 1 | Simonds. | Landscape architecture. | Holt, Rinehart, and Winston, |
| 2 | Leroy g. Hannebaunn. | Landscape design practical approach (5th edition) | Prentice Hall, Englewood Cliffs |
| 3 | Nichaoel E. Doyle. | Colour drawing:design drawings skils and technique for architects, landscape architect, and interior designers, 2nd edition | Southern Illinois University Press |

**Programme :** Diploma Programme in Interior Design and Decoration (ID).
**Course :** Set Design. **Course code :** 1586
**Prerequisite :** Nil

**Teaching & Examination Scheme:**

| Teaching Scheme | | | | Examination Scheme | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hrs / week | | | Credits | TH Paper Hrs. | Marks | | | | | | | |
| TH | TU | PR | | | | TH | TEST | TH+TEST | PR | OR | TW | TOTAL |
| 01 | -- | 04 | 05 | -- | Max. | -- | -- | -- | -- | 50 | 50 | 100 |
| | | | | | Min. | -- | -- | -- | -- | 20 | 20 | -- |

**Rationale:**

This course intends the Students will be able to identify the elements of set design and have gained some skill in the manipulation of design elements.

**Objectives:**

The student will be able to

1. Develop an understanding of design practices utilized in theatrical scenic design. Lear to analyze a script from a scenic design perspective.
2. Develop research skills in scenic design.
3. Develop a scenic design process.
4. Develop skills in representing initial design decisions through thumb-nail sketches and floor plans.
5. Develop skills in making 2-D representations of final design decisions through creating theatrical floor plans, perspective sketches and renderings.
6. Develop skills in making 3-D representations of final design decisions through creating concept, white, and presentation models.
7. Develop an appreciation for varied design solutions for theatrical productions.

**Contents:Theory**

| Topic No. | Topic & Subtopic | Hours |
|---|---|---|
| 1. | **Introduction of basic set, stage. floor plans**<br>1.1 Script Analysis<br>1.2 Area Assessment<br>1.3 Defining use area<br>1.4 Site inventory | 06 |
| 2. | **Selection of materials for set design**<br>2.1 Light & it's type<br>2.2 Sound arrangement<br>2.3 Curtains<br>2.4 Wings<br>2.5 Furniture Elements<br>2.6 Colour scheme | 05 |
| 3. | **Design process.**<br>3.1 Plan<br>3.2 Elevations<br>3.3 Perspective Sketching | 05 |
| | **Total** | **16** |

**Laboratory work**

| SN | List of practicals: |
|---|---|
| | As per the script develop a |
| 1 | Set scenic with the help of set designing elements |
| 2 | Draw the Plans, Elevations & perspective |
| 3 | Develop& Draw with the help of computer graphic software |

**Learning Resources:**

**Text Books:**

| SN | Author | Title | Publisher |
|---|---|---|---|
| 1 | Lynn Pecktal | Designing and Drawing for the Theatre | McGraw-Hill |
| 2 | Parker, Oren W.; Wolf. Craig, R. | Scene Design and Stage Lighting, Sixth Edition | Holt, Rinehart, and Winston, |
| 3 | Sporre, Dennis J.; Burroughs, Robert C. (Bookstore) | Scene Design in the Theatre, | Prentice Hall, Englewood Cliffs |
| 4 | Darwin Reid Payne | Theory and Craft of the Scenographic Model<br>Revised Edition | Southern Illinois University Press |

**Programme :** Diploma Programme in Interior Design and Decoration (ID).
**Course :** Graphic Design. **Course code :** 1587
**Prerequisite :** Nil

**Teaching & Examination Scheme:**

| Teaching Scheme | | | | Examination Scheme | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hrs / week | | | Credits | TH Paper Hrs. | Marks | | | | | | | |
| TH | TU | PR | | | | TH | TEST | TH+TEST | PR | OR | TW | TOTAL |
| 01 | -- | 04 | 05 | -- | Max. | -- | -- | -- | -- | 50 | 50 | 100 |
| | | | | | Min. | -- | -- | -- | -- | 20 | 20 | -- |

**Rationale:**

Graphic Design is intended to be a fist course in computer aided page design. The skilful combining of images and text become the core of this course. It is a working studio class and through demonstrations and hands on work you will learn to solve visual problems using Adobe Photoshop CS2 and Adobe In Design CS2. This "hands on" experience is the key to success in this class. In the end, you will work on traditional design problems leading to a portfolio of 10 pieces illustrating concepts learned.

From postage stamps to giant billboards, graphic design permeates our environment. Understanding how to apply basic design concepts to the presentation of informative or persuasive material is crucial to communicating with an audience. Typography, image, space, colour, and form will be integrated as the term progresses. The main emphasis of the course will be on you and your work. By actually working, taking risks, experimenting, making mistakes and creating with the computer, much is to be learned.

**Objectives:**

The student will be able to

1. Develop photographs using photoshop and coreldraw
2. Develop 'walk through' presentation.

**Contents:Theory**

| Topic No. | Topic & Subtopic | Hours |
|---|---|---|
| 1. | **Technical Topics**<br>**1.1 Photoshop & Coral Draw**<br>Editing photographs for use in projects.<br>Fonts and Typefaces, Ink Jet printing using archival materials.<br>The fine print, Finding image resources on the web Layers, scale page layout and design, Creating images for print and for web pages**:**managing file size. | 08 |
| 2 | **2.1 Two Dimensional Design Principles:**<br>2.1.1 Form.<br>2.1.2 Repetition<br>2.1.3 Structure<br>2.1.4 Similarity<br>2.1.5 Gradation<br>2.1.6 Radiation<br>2.1.7 Anomaly<br>2.1.8 Contrast<br>2.1.9 Concentration<br>2.1.10 Texture<br>2.1.11 Space | 08 |

| Topic No. | Topic & Subtopic | Hours |
|---|---|---|
| | **Total** | **16** |

**Laboratory Work**

| SN | List of practical |
|---|---|
| | 4 major projects to be executed on paper.<br>Your final portfolio will include the final printed examples of that work as well as electronic variations and trials leading up to your finished, final solutions. |
| 1 | Design U. S. Postage color output to be 7" X 9" Guidelines for designing a U. S postal stamp Every new stamp issued from 1997 to present |
| 2 | Design poster for an art or cultural event. Size 13" X 19". The Swiss Poster Collection at Canegie Mellon University Armin Hoffman Poster Designs Poster Designs using the letter "B" The International Poster Biennale in Warsaw September 11, 2001 poster project Rene Warner's mega link list Palestine Poster Project |
| 3 | CD design Eisner Museum History of Album Design, Interesting flash presentations Wikipedia article Museum of Bad Album Covers Visual Encyclopedia of Symbols |
| 4 | Design book cover including front, back, spine and end flaps |

**Learning Resources:**

**Text Books:**

| SN | Author | Title | Publisher |
|---|---|---|---|
| 1 | Jim Krause; Paperback | Layout Index**:**Brochure, Web Design, Poster, Flyer, Advertising, Page Layout, Newsletter, Stationery Index - | McGraw-Hill |
| 2 | Robin Williams (Author); Paperback | The Non-Designer's Design Book, Second Edition - | Holt, Rinehart, and Winston, |
| 3 | http**:**//www. adobe. com/ | Numerous Photoshop tutorials online at | -- |
| 4 | Videos**:**http**:**//lynda. com/. | Excellent Photoshop | -- |
| 5 | Photoshop CS2 Essential Training with Michael Ninness | Virtual Training Co. | Prentice Hall, Englewood Cliffs |

# NON EXAMINATION CREDIT COURSES

**Programme :** Diploma Programme in CE / ME / PS / EE / IF / CM / EL / AE / DD / ID
**Course :** Physical Fitness **Course code :** 1001
**Prerequisite :** Nil

**Teaching & Examination Scheme:**

| Teaching Scheme | | | | Examination Scheme | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Hrs / week | | | Credits | TH Paper Hrs. | Marks | | | | | | |
| TH | TU | PR | | | | TH | TEST | TH+TEST | PR | OR | TW | TOTAL |
| -- | -- | 02 | 02 | -- | Max. | -- | -- | -- | -- | -- | -- | -- |
| | | | | | Min. | -- | -- | -- | -- | -- | -- | -- |

**Rationale:**

To encourage the students in the field of physical & mental conditions.

**Objectives:**

The student will be able to

1. Enhance mental & physical potential to ensure social & community consciousness.
2. Produce adaptable & flexible coping strategies that are required in our diverse & ever changing society.
3. Understand the importance of exercise & its contribution in building the physical fitness.
4. Build / develop self-confidence in students.
5. Make students healthy.

**Contents:**

| Topic No. | Topic & Subtopic | Hours |
|---|---|---|
| 1 | **Fitness**<br>1.1 Concept of fitness & its significance,<br>1.2 Dimension of fitness, Physical & Mental fitness,<br>1.3 Components of physical fitness-general and specific<br>1.4 Relationship with health & heredity.<br>1.5 Factors influencing fitness-age, sex, climate, diet, exercise, training. | 04 |
| 2 | **Muscular Fitness**<br>2.1 Running, body control and body exercise.<br>2.2 Marching and turning.<br>2.3 Physical training exercise (standing) No.1 to 8.<br>2.4 Physical training exercise (sitting) No.1 to 8. | 24 |
| 3 | **Fitness & Health**<br>Medical fitness a) medical examination, b) hard step test c) stress test & d) general. | 04 |
| | **Total** | **32** |

**Suggested Instructional Strategies:**

Lecture method, use of teaching aids, demonstration, assignments.

**Learning Resources:**

**Reference Books:**

| SN | Author | Title | Publisher |
|---|---|---|---|
| 1 | Modak | Health & fitness for children | Sports Publication |
| 2 | Mishra | Health & Physical Education. | Sports Publication |
| 3 | Saini | Physical fitness and Sports | Sports Publication |
| 4 | Jain | Fielding in Physical Ecuation | Sports Publication |

**Programme :** Diploma Programme in CE / ME / PS / EE / IF / CM / EL / AE / DD / ID
**Course :** Aerobics **Course code :** 1002
**Prerequisite :** Nil

**Teaching & Examination Scheme:**

| Teaching Scheme | | | | Examination Scheme | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Hrs / week | | | Credits | TH Paper Hrs. | Marks | | | | | | |
| TH | TU | PR | | | | TH | TEST | TH+TEST | PR | OR | TW | TOTAL |
| -- | -- | 02 | 02 | -- | Max. | -- | -- | -- | -- | -- | -- | -- |
| | | | | | Min. | -- | -- | -- | -- | -- | -- | -- |

**Rationale:**

Now a days, due to changed lifestyle, everyone of us feels stressed at workplace and even at home. This definitely affects our physical and mental fitness. Aerobics is a simple and easy way to overcome it without the need of space, jim, equipment etc. The course will encourage the students to improve their fitness in the field of physical & mental conditions.

**Objectives:**

The student will be able to

1. Enhance mental & physical potential to ensure social & community consciousness.
2. Understand the importance of exercise & its contribution in building the physical fitness.
3. Build self-confidence among them.
4. Make themselves healthy physically & mentally.

**Contents:**

| Topic No. | Topic & Subtopic | Hours |
|---|---|---|
| 1 | **Warm up**<br>Low intensity rhythmic aerobic exercise involving major muscle groups (legs) that prepares the body for more intense exercise. | 16 |
| 2 | **Ball Exercise**<br>A firm, very large, usually inflatable ball used in various exercises, chiefly to strengthen the back, pelvis, and abdominal muscles. | |
| 3 | **Mat Exercise**<br>Mat exercises in Pilates are performed using the floor and a rubber mat. | |
| 4 | **Basic yoga**<br>Yoga is a Sanskrit word meaning union or joining. In reality it's a very general term that encompasses many different disciplines, from the purely physical to the purely spiritual. | |
| 5 | **Stepper**<br>Aerobics performed in a choreographed routine by stepping up onto and down from a portable platform. | |
| 6 | **Aerobic dance**<br>A system of exercises combining aerobics with dance steps and usually done with music. | |

| Topic No. | Topic & Subtopic | Hours |
|---|---|---|
| 7 | **Isometric**<br>Muscle-building exercises (or a system of muscle building exercises) involving muscular contractions against resistance without movement (the muscles contracts but the length of the muscle does not change) done in excess. | 16 |
| 8 | **Stretching**<br>Low intensity rhythmic aerobic exercise involving major muscle groups (legs) that prepares the body for more intense exercise. | |
| 9 | **Cardio**<br>Constant moderate intensity work that uses up oxygen at a rate in which the cardio respiratory system can replenish oxygen in the working muscles. Examples of such activity are exercises like stationary bike riding or walking. It is a good activity for fat loss when done in the right amounts but highly catabolic if done in excess. | |
| 10 | **Cool down**<br>Low intensity rhythmic aerobic exercise involving major muscle groups (legs) that helps the body recover back to normal | |
| | **Total** | **32** |

**Requirement:**

Students shall bring with them Mat, ball, exercise cloths and sport shoes.

**Suggested Instructional Strategies for Practicals:**

**Class 1**

| Time | Mode |
|---|---|
| 20mins | Warm up |
| 20mins | Stretching |
| 20mins | Exercise |
| 20mins | Cardio |
| 15mins | Basic Yoga |
| 15mis | Aerobic Dance |
| 10mins | Cool Down |

**Class 2**

| Time | Mode |
|---|---|
| 20mins | Warm up |
| 20mins | Stretching |
| 20mins | Exercise |
| 20mins | Cardio |
| 15mins | Ball |
| 15mis | Isometric |
| 10mins | Cool Down |

**Class 3**

| Time | Mode |
|---|---|
| 20mins | Warm up |
| 20mins | Stretching |
| 20mins | Exercise |
| 20mins | Cardio |
| 15mins | Mat |
| 15mis | Muscular |
| 10mins | Cool Down |

**Class 4**

| Time | Mode |
|---|---|
| 20mins | Warm up |
| 20mins | Streching |
| 20mins | Excerise |
| 20mins | Cardio |
| 15mins | Basic Yoga |
| 15mis | Aerobc D |
| 10mins | Cool Down |

**Class 5**

| Time | Mode |
|---|---|
| 20mins | Warm up |
| 20mins | Stretching |
| 20mins | Exercise |
| 20mins | Cardio |
| 15mins | Ball |
| 15mis | Isometric |
| 10mins | Cool Down |

**Class 6**

| Time | Mode |
|---|---|
| 20mins | Warm up |
| 20mins | Stretching |
| 20mins | Exercise |
| 20mins | Cardio |
| 15mins | Stepper |
| 15mis | Basic Yoga |
| 10mins | Cool Down |

**Class 7**

| Time | Mode |
|---|---|
| 20mins | Warm up |
| 20mins | Stretching |
| 20mins | Exercise |
| 20mins | Cardio |
| 15mins | Mat |
| 15mis | Muscular |
| 10mins | Cool Down |

**Class 8**

| Time | Mode |
|---|---|
| 20mins | Warm up |
| 20mins | Streching |
| 20mins | Excerise |
| 20mins | Cardio |
| 15mins | Basic Yoga |
| 15mis | Aerobc D |
| 10mins | Cool Down |

**Class 9**

| Time | Mode |
|---|---|
| 20mins | Warm up |
| 20mins | Stretching |
| 20mins | Exercise |
| 20mins | Cardio |
| 15mins | Ball |
| 15mis | Isometric |
| 10mins | Cool Down |

**Class 10**

| Time | Mode |
|---|---|
| 20mins | Warm up |
| 20mins | Stretching |
| 20mins | Exercise |
| 20mins | Cardio |
| 15mins | Stepper |
| 15mis | Basic Yoga |
| 10mins | Cool Down |

**Class 11**

| Time | Mode |
|---|---|
| 20mins | Warm up |
| 20mins | Stretching |
| 20mins | Exercise |
| 20mins | Cardio |
| 15mins | Mat |
| 15mis | Muscular |
| 10mins | Cool Down |

**Class 12**

| Time | Mode |
|---|---|
| 20mins | Warm up |
| 20mins | Streching |
| 20mins | Excerise |
| 20mins | Cardio |
| 15mins | Basic Yoga |
| 15mis | Aerobc D |
| 10mins | Cool Down |

**Class 13**

| Time | Mode |
|---|---|
| 20mins | Warm up |
| 20mins | Stretching |
| 20mins | Exercise |
| 20mins | Cardio |
| 15mins | Ball |
| 15mis | Isometric |
| 10mins | Cool Down |

**Class 14**

| Time | Mode |
|---|---|
| 20mins | Warm up |
| 20mins | Stretching |
| 20mins | Exercise |
| 20mins | Cardio |
| 15mins | Stepper |
| 15mis | Basic Yoga |
| 10mins | Cool Down |

**Class 15**

| Time | Mode |
|---|---|
| 20mins | Warm up |
| 20mins | Stretching |
| 20mins | Exercise |
| 20mins | Cardio |
| 15mins | Mat |
| 15mis | Muscular |
| 10mins | Cool Down |

**Class 16**

| Time | Mode |
|---|---|
| 20mins | Warm up |
| 20mins | Streching |
| 20mins | Excerise |
| 20mins | Cardio |
| 15mins | Basic Yoga |
| 15mis | Aerobc D |
| 10mins | Cool Down |

**Learning Resources:**

**Reference Books:**

| SN | Author | Title | Publisher |
|---|---|---|---|
| 1 | Mishra | Health & Physical Education. | Sports Publication |
| 2 | Saini | Physical fitness and Sports | Sports Publication |
| 3 | Jain | Fielding in Physical Education | Sports Publication |

**Programme :** Diploma Programme in CE / ME / PS / EE / IF / CM / EL / AE / DD / ID
**Course :** Yoga **Course code :** 1003
**Prerequisite :** Nil

**Teaching & Examination Scheme:**

| Teaching Scheme | | | | Examination Scheme | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Hrs / week | | | Credits | TH Paper Hrs. | Marks | | | | | | |
| TH | TU | PR | | | | TH | TEST | TH+TEST | PR | OR | TW | TOTAL |
| -- | -- | 02 | 02 | -- | Max. | -- | -- | -- | -- | -- | -- | -- |
| | | | | | Min. | -- | -- | -- | -- | -- | -- | -- |

**Rationale:**

To facilitate the development of physical, mental, intellectual, moral & spiritual powers amongst the students.

**Objectives:**

The student will be able to

1. Develop memory & intelligence of the students through various Yogic techniques.
2. Protect the health of the students & help them to develop vital force & will power through the practice of Yogasana & Pranayama.

**Contents:**

| Topic No. | Topic & Subtopic | Hours |
|---|---|---|
| 1 | **Introduction** to Yoga, importance, rules & classification. | 02 |
| 2 | **Types of Yogasanas** | 24 |
| | **A) Sitting postures**<br>1. Padmasana<br>2. Badha Padmasana<br>3. Parvatasana<br>4. Utthita Padmasana<br>5. Kukutasana<br>6. Garbhasana<br>7. Siddhaasana<br>8. Simhaasna<br>9. Mandukasana<br>10. Gomukhasana<br>11. Padangusthasana<br>12. Kandapeedanasana<br>13. Veerasana<br>14. Pashchimottanasana<br>15. Janu Shirasana<br>16. Ardha Matsyendrasana<br>17. Purna Matsyendrasana<br>18. Ardha Vakrasana<br>19. Vakrasana<br>20. Akarna Dhanurasana. | |
| | **B) Supine postures**<br>1. Shavasana<br>2. Ekapada Uttanasana<br>3. Uttanapadasana<br>4. Pavanamuktasana.<br>5. Setubandhasana<br>6. Tolangulasana<br>7. Matsyasana<br>8. Katiasana<br>9. Suptabhadrasana<br>10. Viparitakarani Mudra<br>11. Sarvangasana<br>12. Halasana<br>13. Vartulasana. | |
| | **C) Abdominal postures**<br>1. Ardha Shalabhasana<br>2. Purna Shalabhasana<br>3. Bhujangasana<br>4. Dhanurasana<br>5. Makarasana<br>6. Viparita Matsyasana. | |

| Topic No. | Topic & Subtopic | Hours |
|---|---|---|
| | **D) Hand postures**<br>1. Mayurasana<br>2. Virshchikasana<br>3. Bakasana<br>4. Tolasana<br>5. Uttshita dwihastabhujasana<br>6. uttamangasana<br>7. Utthita ekapadashirasana<br>8. Konasana. | |
| | **E) Kneeling postures**<br>1. Vajrasana<br>2. Supta Vajrasana<br>3. Bhoo-namana-Vajrasana<br>4. Ushtrasana<br>5. Vurshasana. | |
| | **F) Leg postures**<br>1. Garudasana<br>2. Vrukshasana<br>3. Vatayanasana<br>4. Santulasana<br>5. Natarajasana<br>6. Utkatasana<br>7. Tarasana<br>8. Trikonasana<br>9. Padahastasana<br>10. Chakrasana. | |
| | **G) Head postures**<br>1. Shirshasan<br>2. Urdhva Padmasana<br>3. Urdhva Samyukta Padmasana | |
| 3 | Suryanamaskara | 02 |
| 4 | Types of Pranayama | 04 |
| | **Total** | **32** |

**Suggested Instructional Strategies:**

Lecture method, Use of teaching aids, Demonstration, Assignments.

**Learning Resources:**

**Reference Books:**

| SN | Author | Title | Publisher |
|---|---|---|---|
| 1 | Gopal Usha | Yogasan (Hindi) | Sports Publication |
| 2 | Gopal Usha | Yoga and Sharir Rachana (Hindi) | Sports Publication |
| 3 | Lyengar | Light on Yoga | Knopf Publication Group |
| 4 | George Feuerstein | The Yoga Tradition | Hohm press |

**Programme :** Diploma Programme in CE / ME / PS / EE / IF / CM / EL / AE / DD / ID
**Course :** Marshal Art **Course code :** 1004
**Prerequisite :** Nil

**Teaching & Examination Scheme:**

| Teaching Scheme | | | | Examination Scheme | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Hrs / week | | | Credits | TH Paper Hrs. | Marks | | | | | | |
| TH | TU | PR | | | | TH | TEST | TH+TEST | PR | OR | TW | TOTAL |
| -- | -- | 02 | 02 | -- | Max. | -- | -- | -- | -- | -- | -- | -- |
| | | | | | Min. | -- | -- | -- | -- | -- | -- | -- |

**Rationale:**

This non examination credit course is introduced to encourage the student learn and habituate certain marshal arts for self protection.

**Objectives:**

The student will be able to

1. Know the basic necessary steps for marshal art
2. Known the basic punch

**Contents:**

| Topic No. | Topic & Subtopic | Hours |
|---|---|---|
| 1 | **Yellow belt:** Exercise, Basic kick punch, block, fight tans, kanta first | 02 |
| 2 | **Orange Belt:** Basic kick, punch block and power, tans long and short fight, kanta first | 06 |
| 3 | **Blue belt:** kick and punch block in one count multiple action, speed kick and fast movement kanta 1, 2, 3 | 06 |
| 4 | **Green Belt:** kick punch block four to five action kick punch fight point technique, three to four minutes round to play | 06 |
| 5 | **Brown belt:** non chock training brick breaking ice breaking and yellow belt to green total training and kanta | 06 |
| 6 | **Black Belt:** Hammer punch, breaking bricks in stomach, eyes, ice breaking, point to point fight, to show the total revenge, knockout fight | 06 |
| | **Total** | **32** |

**Suggested Instructional Strategies:**

Lecture method, Use of teaching aids, Demonstration.

**Learning Resources:**
**Reference Books:**

| SN | Authors | Title | Publisher |
|---|---|---|---|
| 1. | Bruce Miller | The meaning of forms and kat's | Fighting Arts |
| 2. | Harry crews | Karate is a thing of sprit | Quill Books |

**Programme :** Diploma Programme in CE / ME / PS / EE / IF / CM / EL / AE / DD / ID
**Course :** Personality Development **Course code :** 1005
**Prerequisite :** Nil

**Teaching & Examination Scheme:**

| Teaching Scheme | | | | Examination Scheme | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Hrs / week | | | Credits | TH Paper Hrs. | Marks | | | | | | |
| TH | TU | PR | | | | TH | TEST | TH+TEST | PR | OR | TW | TOTAL |
| -- | -- | 02 | 02 | -- | Max. | -- | -- | -- | -- | -- | -- | -- |
| | | | | | Min. | -- | -- | -- | -- | -- | -- | -- |

**Rationale:**

There is always a gap between existing and what expected to exist. This is with everybody. The gap is widening day by day. The gap affects personality, physique, health, ethics, emotions, ego, esteem and/or motivation. The gap of difference between existing self and imagined self can be bridged up by gradual development in physical, psychological and sociological areas related to self. This is Personality-development.

**Objectives:**

The student will be able to

1. Understand the concept Attitude.
2. Identify various threats
3. Know the various Steps to build a Positive Personality
4. Understand the concept Motivation

**Contents:**

| Topic No. | Topic & Subtopic | Hours |
|---|---|---|
| 1 | **Attitude:**<br>Importance<br>How to build a positive Attitude<br>Interview techniques – Necessity, Tips for handling common questions, Group discussion. | 06 |
| 2 | **Motivation:**<br>Internal and External<br>Difference between Inspiration and Motivation<br>De-motivating factors<br>Motivation Techniques | 06 |
| 3 | **Steps to build a positive personality,** Areas of personality development self analysis | 04 |
| 4 | **SWOT Analysis** Strength, Weaknesses, Opportunities & Threats | 04 |
| 5 | Introduction stress physiology & Health counteracting stress & yoga | 06 |
| 6 | Introduction ways to get most out of time management. How to plan your time. Process of time planning | 02 |
| 7 | Ethics – Introduction Basic of ethics code of ethics. | 02 |
| 8 | Group discussion on any one emerging topic. | 02 |
| | **Total** | **32** |

**Suggested Instructional Strategies:**

Lecture method, Use of teaching aids, Group discussion, Demonstration, Case study

**Learning Resources:**

**Reference Books:**

| SN | Author | Title | Publisher |
|---|---|---|---|
| 1 | Kenneth a kiewra<br>Nelson F. dubols | Learning to learn | Allyn and Bacon |
| 2 | E. H. Megrath | Basic managerial skills for all | Prentice Hall of India Ltd. |
| 3 | P. D. Kulkarni &<br>B. B. Sharma | Independent study techniques | T.T.T.I, Chandigarth |
| 4 | Patrick Forsyth | How to motivate people | Kogan page |
| 5 | Shiv Khera | You can win | Macmillan India |
| 6 | Philips Covey | 7 habits of people | Parragon, Simon |

**Programme :** Diploma Programme in CE / ME / PS / EE / IF / CM / EL / AE / DD / ID
**Course :** Model Making **Course code :** 1006
**Prerequisite :** Nil

**Teaching & Examination Scheme:**

| Teaching Scheme | | | | Examination Scheme | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Hrs / week | | | Credits | TH Paper Hrs. | Marks | | | | | | |
| TH | TU | PR | | | | TH | TEST | TH+TEST | PR | OR | TW | TOTAL |
| -- | -- | 02 | 02 | -- | Max. | -- | -- | -- | -- | -- | -- | -- |
| | | | | | Min. | -- | -- | -- | -- | -- | -- | -- |

**Rationale:**

Model of structure enables clear & complete idea of the structure before construction Progress of construction achieved qualitatively with the help of model. It attracts visitors, experts, users, engineers, architect & costumers. It contributes beauty of the structure It provides self-employment for engineers who has interest in the field.

**OBJECTIVES:**

THE STUDENT WILL BE ABLE TO

1. UNDERSTAND PURPOSE OF MODELS.
2. KNOW VARIOUS TYPES OF MODELS.
3. KNOW VARIOUS MATERIALS AND TOOLS USED FOR.
4. DEVELOP SKILLS OF MAKING MODELS.

**CONTENTS:**

| Topic No. | Topic & Subtopic | Hours |
|---|---|---|
| 1 | **Introduction**<br>1.1 Introduction to model making.<br>1.2 Purpose of making models. | 1 |
| 2 | **Types of Models**<br>2.1 Topographic models<br>2.1.1 Site models<br>2.1.2 Landscape model<br>2.1.3 Garden Models<br>2.2 Building models<br>2.2.1 Urban models<br>2.2.2 Actual bldg models<br>2.2.3 Structural models<br>2.2.4 Interior models<br>2.3 Special models<br>2.3.1 Design models<br>2.3.2 Object models | 1 |
| 3 | **Essential components of a model.** | 1 |
| 4 | **Materials used** for various types of models such as<br>Paper, card board, Mount board, Cork, Plastic, Acrylic, Glass, clay, Plaster of Paris, wood, timber items, Plywood. std. Sizes available, properties of all above materials. | 1 |

| Topic No. | Topic & Subtopic | Hours |
|---|---|---|
| 5 | Various tools & machinery used for making models | 1 |
| 6 | Use of Glues and adhesives for making models. | 1 |
| 7 | Scale of model. Various scales to be used for various model types. | 1 |
| 8 | Preparation of work for making of any model. | 1 |
| 9 | Procedure of drawing the model to a required scale. | 1 |
| 10 | Procedure of cutting of models | 1 |
| 11 | Extra items to be incorporated for a model such as trees & bushes, human figures, vehicle, street lights, railing, fences & other urban features especially to a 'building' model. | 1 |
| 12 | Presentation & painting procedure of a finished model. | 1 |
| 13 | a. One ' building' model for a 4 to 6 room frame structure bungalow to 1.50 scale using mount board.<br>b. Same scale but showing furniture or 'Interior' model. | 20 |
| | **Total** | **32** |

**Suggested Instructional Strategies:**

Lecture method, Use of teaching aids, Demonstration, Assignments.

**Learning Resources:**

**Reference Books:**

| SN | Author | Title | Publisher |
|---|---|---|---|
| 1 | David Neat | Model making: Materials and methods | The Crowood Press Ltd. |
| 2 | Ray Gibson | The Usborne Book of Making Model | EDC Publisher |
| 3 | Martha Sutherland | Model making: A basic guide | WW Norton & Co. |

**Programme :** Diploma Programme in CE / ME / PS / EE / IF / CM / EL / AE / DD / ID
**Course :** Repair of Domestic Appliances **Course code :** 1007
**Prerequisite :** Nil

**Teaching & Examination Scheme:**

| Teaching Scheme | | | | Examination Scheme | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hrs / week | | | Credits | TH Paper Hrs. | Marks | | | | | | | |
| TH | TU | PR | | | | TH | TEST | TH+TEST | PR | OR | TW | TOTAL |
| -- | -- | 02 | 02 | -- | Max. | -- | -- | -- | -- | -- | -- | -- |
| | | | | | Min. | -- | -- | -- | -- | -- | -- | -- |

**Rationale:**

With increase in day to day need electrical domestic appliances e.g. food mixers, vacuum cleaner, room water heater, entertainment, electric iron, refrigerator, it is essential to know their functions and operating principal for their repair. This curse develops such skills in student.

**Objectives:**

The student will be able to

1. Acquire the knowledge of different electrical principles.
2. Trouble shoot the different probable faults
3. Carry out maintenance of domestic appliance at regular time interval
4. Repair minor and major faults

**Contents:**

| Topic No. | Topic & Subtopic | Hours |
|---|---|---|
| 1 | **Motor pump set detail (Starter)**<br>1.1 constructional detail<br>1.2 testing and remedies | 02 |
| 2 | **Petrol generator set**<br>2.1 constructional detail<br>2.2 working principle<br>2.3 Amount of power output<br>2.4 fault and remedies | 02 |
| 3 | **Electric washing machine**<br>3.1 working principle<br>3.2 types of washing machines<br>3.3 possible faults and remedies | 02 |
| 4 | **Electric geyser**<br>4.1 working principle<br>4.2 types of geysers<br>4.3 possible faults and remedies | 02 |
| 5 | **Electric motor (Universal motor)**<br>5.1 working principle<br>5.2 constructional detail<br>5.3 Motors used in Fans and Mixers<br>5.4 faults and remedies | 04 |

| Topic No. | Topic & Subtopic | Hours |
|---|---|---|
| 6 | **Demonstration of all the parts and trouble shooting of:**<br>6.1 pump set<br>6.2 petrol generator set<br>6.3 electric water heater /geyser and trouble shoot the fault in iron<br>6.4 electric washing machine<br>6.5 electric motor (Fans and Mixers). | 20 |
| | **Total** | **32** |

**Suggested Instructional Strategies:**

Lecture method, Use of teaching aids, Demonstration, Assignments.

**Learning Resources:**

**Reference Books:**

| SN | Author | Title | Publisher |
|---|---|---|---|
| 1 | K. B. Bhatia | Study of Electrical Appliances | Khanna Publication |
| 2 | Arora | Testing, Commissioning & Maintenance of Electrical Appliances | Rainbow Publication |
| 3 | K. B. Bhatia | Electrical Appliances | New Height Publication |

**Programme :** Diploma Programme in CE / ME / PS / EE / IF / CM / EL / AE / DD / ID
**Course :** Gardening **Course code :** 1008
**Prerequisite :** Nil

**Teaching & Examination Scheme:**

| Teaching Scheme | | | | Examination Scheme | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Hrs / week | | | Credits | TH Paper Hrs. | Marks | | | | | | |
| TH | TU | PR | | | | TH | TEST | TH+TEST | PR | OR | TW | TOTAL |
| -- | -- | 02 | 02 | -- | Max. | -- | -- | -- | -- | -- | -- | -- |
| | | | | | Min. | -- | -- | -- | -- | -- | -- | -- |

**Rationale:**

One of the environmental threats our planet faces today is the potential for long-term changes in earth's climate and temperature pattern. Hence management of open spaces is a must for creating good environment and for environment protection. Basic understanding of the functional and ecological aspects of planting which are must to restore balance between people and nature.

**Objectives:**

The student will be able to

1. Learn basic gardening principles including - Water needs, Selection of appropriate plants, Weed management, improve soil structure and feed the soil rather than plants, Managing insect pests.
2. Introduce students to the basic terms, concepts and practices associated with installing and maintaining a garden.

**Contents:**

| Topic No. | Topic & Subtopic | Hours |
|---|---|---|
| 1 | **Getting to know garden**: garden basics- bed and box preparation, tools and equipment. | 02 |
| 2 | **General principles**: types of soils, plant food, manures and fertilizer, organic and inorganic, biofertilizer, liquid manures, method and time of fertilizer use | 02 |
| 3 | **Garden Stewardship**: watering, weeding, erosion and crop maintenance | 02 |
| 4 | **Applying academic course in practice for**<br>4.1 Selection of site for gardening and cleaning of unwanted material such as garbage, weeds.<br>4.2 Familiarization of horticultural tools and their uses. Handling and maintenance of gardening equipments.<br>4.3 Preparation of seedbed and box for different flowers and plants.<br>4.4 Culture of Annuels, shrubs, dalia, rose, palms, ferns and cacti<br>4.5 Selecting plants or seeds (flowering or ornamental) for planting and caring according to the season.<br>4.6 Watering, trimming, pruning and thinning of plants.<br>4.7 Practice in budding, cutting, layering and grafting of plants.<br>4.8 Identification of pests and diseases of flower plants and fruit trees.<br>4.9 Preparation of doses of insecticides, weedicites, fungicides and | 26 |

| Topic No. | Topic & Subtopic | Hours |
|---|---|---|
| | pesticides.<br>4.10 Preparation of composite mixture and manuring the plants.<br>4.11 Development and maintenance of lawns.<br>4.12 Visit to well known gardens and nurseries | |
| | **Total** | **32** |

**Suggested Instructional Strategies:**

Lecture method, Use of teaching aids, demonstration, case study.

**Learning Resources:**

**Reference Books:**

| SN | Author | Title | Publisher |
|---|---|---|---|
| 1 | Edmant, J.B | Fundamentals of Horticulture. | Tata McGraw Hill |
| 2 | Chaudhari H.K | Elementary principles of plant breeding. | Oxford & IBH |
| 3 | David Laneashire | Gardening - How to grow things | Penguin Books |
| 4 | Mel Bartholomew | Square Foot Gardening | Rodale |
| 5 | Alan Titchmarsh | How to be Gardener | Hylas Publication |

**Programme :** Diploma Programme in CE / ME / PS / EE / IF / CM / EL / AE / DD / ID
**Course :** Public speaking **Course code :** 1009
**Prerequisite :** Nil

**Teaching & Examination Scheme:**

| Teaching Scheme | | | | Examination Scheme | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Hrs / week | | | Credits | TH Paper Hrs. | Marks | | | | | | |
| TH | TU | PR | | | | TH | TEST | TH+TEST | PR | OR | TW | TOTAL |
| -- | -- | 02 | 02 | -- | Max. | -- | -- | -- | -- | -- | -- | -- |
| | | | | | Min. | -- | -- | -- | -- | -- | -- | -- |

**Rationale:**

Public speaking is an 'Art'. For good leadership qualities, it is must. Therefore, this course has been kept in non examination credit courses for all diploma programme.

**Objectives:**

The student will be able to

1. Formulate- Specific purpose statement
2. Analyze & adopt to audience
3. Organize ideas & constructing out line
4. Use language effective & so forth
5. Formulate all above, based on creative thinking & take decisions there on.

**Contents:**

| Topic No. | Topic & Subtopic | Hours |
|---|---|---|
| 1 | **Speaking & Listening**<br>1.1 Speaking in public<br>1.2 Listening, specify the skill of listening<br>1.3 Creative thinking & decision making<br>1.4 Write report on evaluation of your major strength & weakness as a speaker & listener. | 4 |
| 2 | **Speech Preparation**<br>2.1 Selecting a topic purpose<br>2.2 Analysis of the audience<br>2.3 Supporting your ideas<br>2.4 To plan to conduct interview for class room speeches & hold the interviews afterward.<br>2.5 To make two possible specific purpose statement suitable for the speech assignment. | 5 |
| 3 | **Speech preparation, Drafting the outline**<br>3.1 Structuring the body of the speech<br>3.2 Beginning & ending the speech<br>3.3 Outlining the speech<br>3.4 For your next speech design & circulate among your classmates audience analysis. | 5 |
| 4 | **Presenting the speech**<br>4.1 Using language | 5 |

| Topic No. | Topic & Subtopic | Hours |
|---|---|---|
| | 4.2 Delivery<br>4.3 Using visual Aids<br>4.4 Deliver a speech prepared by you, Hear the speech deliver by you. (After recording & reply) & improve. | |
| 5 | **Varieties of Public Speaking**<br>5.1 to inform<br>5.2 to persuade<br>5.3 on special occasions<br>5.4 in small groups.<br>5.5 Address through media<br>5.6 Analyze the given speech fully & record.<br>5.7 Attend a speech arranged in campus. Prepare on brief report on the speakers introduction conclusion & non-verbal communication. | 7 |
| 6 | **Group Discussion**<br>6.1 Group discussion on characteristics of an effective Public Speaking & ineffective Public Speaking.<br>6.2 Using the methods of brain storming in a group of 8 to 15 students by selecting three topics for classroom speech. | 6 |
| | **Total** | **32** |

**Suggested Instructional Strategies:**

Lecture method, Use of teaching aids, Case study, Group discussion.

**Learning Resources:**

**Reference Books:**

| SN | Author | Title | Publisher |
|---|---|---|---|
| 1 | Stephen E –Lucas. | The art of public speaking | McGraw hill |
| 2 | Dale Carnegie | Public speaking &Influencing Men Business | Taraporwada Sons & Co |
| 3 | Lyman MacInnis | The elements of Great Public Speaking | Ten Speed Press |
| 4 | Sporty King | Public Speaking | Aspatore |

**Programme :** Diploma Programme in CE / ME / PS / EE / IF / CM / EL / AE / DD / ID
**Course :** Computer Hardware Maintenance **Course code :** 1010
**Prerequisite :** Nil

**Teaching & Examination Scheme:**

| Teaching Scheme | | | | Examination Scheme | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hrs / week | | | Credits | TH Paper Hrs. | Marks | | | | | | | |
| TH | TU | PR | | | | TH | TEST | TH+TEST | PR | OR | TW | TOTAL |
| -- | -- | 02 | 02 | -- | Max. | -- | -- | -- | -- | -- | -- | -- |
| | | | | | Min. | -- | -- | -- | -- | -- | -- | -- |

**Rationale:**

The aim of the course is to teach the basic working of the computer motherboard, peripherals and add--on cards. The course helps the students to do the maintenance of the Computer, peripherals and its add--on cards. The students will be able to select the proper peripheral as per their specification and requirement. This is the core course. The course is practical oriented and will develop the debugging skills in the students.

The student will be able to do assemble a computer and also he/she will be able to install software like Operating System, Application Packages, Device Drivers.

The main aim of this course to make a student having well known knowledge of all Hardware devices and their functions, Troubleshooting & Repairing of Faults.

**Objectives:**

The student will be able to

1. Debug and repair the faults in system.
2. Assemble the system.
3. Load the operating system and device drivers in the system.
4. Handle all the trouble shootings and use solution to repair it.

**Contents:**

| Topic No. | Topic & Subtopic | Hours |
|---|---|---|
| 1 | **Motherboard And Its Components'**<br>– Chipset basic, chipset Architecture: North / South Bridge<br>– Architecture of Intel chipset.<br>– Overview and features of System Bus<br>– Memory types & interfacing, SDRAM, DDR, DDR2, DDR3<br>– Concept of cache memory: Internal cache, External cache (L1, L2, L3 cache)<br>– Features & Structure of processors: Pentium, P2, Celeron, P3, P4,Dual Core,C2D,I3.,Processor Socket<br>– Bios Basics, main functions<br>– Motherboard Selection criteria<br>– OS Installation | 06 |
| 2 | **Storage Devices And Its Interfacing**<br>– Hard disk construction and working<br>– FAT basics, Introduction to file system FAT 16, FAT 32, NTFS<br>– Hard disk drive interface: features of parallel AT attachment (PATA), | 06 |

| Topic No. | Topic & Subtopic | Hours |
|---|---|---|
| | Serial ATA (SATA), ATA devices<br>– jumper selections: Master, slave, cable select, ATA cables<br>– ATA RAID: RAID 0, RAID<br>– CD/DVD ROM drive: Construction | |
| 3 | **Display Devices & Interfacing:**<br>– CRT colour monitor<br>– LCD monitor | 04 |
| 4 | **Input & Output Devices:**<br>Construction and Working<br>– Keyboard: Types & working of internal Components.<br>– Mouse: Mechanical, Opt mechanical, optical<br>– Scanner: Types & working (Flat bed, sheetfed, Handheld etc)<br>– Modem: Internal and External: Types, working & interfacing.<br>– Printer: Dot matrix, Inkjet, Laser: working & Structure.<br>– USB<br>– Basics of LAN Devices i.e. NIC,HUB,SWITCHES,ROUTERS,CABELS, Blue Tooth,WiFi etc. | 04 |
| 5 | **Power Supplies**<br>– Block diagram and working of SMPS.<br>– Signal description and pinot diagram of AT and ATX connectors<br>– Symptoms of power problems & troubleshooting. | 06 |
| 6 | **Pc Troubleshooting, Maintenance and Tools**<br>– Preventive Maintenance: Active, Passive, periodic maintenance procedure<br>– Preventive maintenance of peripherals of PC<br>– Fault finding and troubleshooting of the above peripherals<br>– Diagnostic software<br>– Virus infection symptoms, precautions to prevent a virus infection | 06 |
| | **Total** | **32** |

**List of Practical:**

a. Mother Board Component.
b. CMOS setup of Pentium.
c. Hard Disk Partitioning & O.S. Installation
d. Study of HDD: Identify various components of HDD and their functions
e. Study and installation of Cards: VGA, Sound, LAN cards.
f. Installation of Scanner, Printers and Modems.
g. Study of SMPS (ATX)
h. Study of Diagnostic Software's. (Any one)
i. Assembling of PC and Installation of Operating System.
j. Fault Finding & Repairing.

**Suggested Instructional Strategies:**

Lecture method, Use of teaching aids, Group discussion, Demonstration, Case study

**Learning Resources:**

**Reference Books:**

| SN | Author | Title | Publisher |
|---|---|---|---|
| 1 | Mike Meyers, Scott Jernigan | Managing & Troubleshooting PCs | Tata McGraw Hill |
| 2 | Bigelow | Bigelow's Troubleshooting, Maintaining & Repairing PCs | Tata McGraw Hill |
| 3 | Mark Minasi | The Complete PC Upgrade & Maintenance Guide | BPB Publication |
| 4 | D. Balasubramanian | Computer Installation & Servicing | Tata McGraw Hill |
| 5 | Scott Muller | Upgrading & Repairing PCs | Techmedia |

**Programme :** Diploma Programme in CE / ME / PS / EE / IF / CM / EL / AE / DD / ID
**Course :** Mobile Repairing **Course code :** 1011
**Prerequisite :** Nil

**Teaching & Examination Scheme:**

| Teaching Scheme | | | | Examination Scheme | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Hrs / week | | | Credits | TH Paper Hrs. | Marks | | | | | | |
| TH | TU | PR | | | | TH | TEST | TH+TEST | PR | OR | TW | TOTAL |
| -- | -- | 02 | 02 | -- | Max. | -- | -- | -- | -- | -- | -- | -- |
| | | | | | Min. | -- | -- | -- | -- | -- | -- | -- |

**Rationale:**

Life today offers much convenience which involves the use of electronic gadgets. Nowadays, Electronics plays a major role in the field of communication & entertainment. This course is introduced to develop preliminary essential skill of mobile repairing.

**Objectives:**

The student will be able to

1. How to repair & service minor & major handset problem.
2. Study of basic parts of mobile
3. Understand operation of different mobiles.
4. Use of software, multimedia.

**Contents:**

| Topic No. | Topic & subtopic | Hours |
|---|---|---|
| 1. | **Introduction to Mobile and repairing**<br>1.1 Basic of mobile communication.<br>1.2 Use of tools & instruments used in mobile phone repairing.<br>1.3 Details of various components used in mobile phones.<br>1.4 Basic parts of mobile phones (mike, speaker, LCD, antenna)<br>1.5 Sim card, power supply, battery, mobile spare part, soldering & disordering.<br>1.6 Assembling & disassembling of different types of mobile phones.<br>1.7 Different IC's used<br>1.8 Fault finding & trouble shooting e.g. – Network problem, no recharging, no vibration. | 10 |
| 2. | **Advance mobile repairing**<br>2.1 Operating system<br>2.2 Software Applications<br>2.3 Networking faults<br>2.4 Multimedia<br>2.5 Flashing<br>2.6 Formatting<br>2.7 Unlocking<br>2.8 Use of secret code<br>2.9 Downloading<br>2.10 Card reader | 10 |

| Topic No. | Topic & subtopic | Hours |
|---|---|---|
| | 2.11 Bluetooth | |
| 3 | **Mobile Testing Methods**<br>3.1 Track checking in mobile by multimeter<br>3.2 Fault finding testing related to software e.g – sim locked, sim rejected, field visit. | 12 |
| | **TOTAL** | **32** |

**Suggested Instructional Strategies:**

Lecture method, Use of teaching ideas, Demonstration, Assignment, Hands on work with related equipment.

**Learning Resources:**

**Reference Books:**

| SN | Author | Title | Publication |
|---|---|---|---|
| 1 | K.C.Agrawal | Mobile phone training and Solution | Micro publication |
| 2 | Manohar Lotia | Modern mobile repairing | BPB publication |

**Programme :** Diploma Programme in CE / ME / PS / EE / IF / CM / EL / AE / DD / ID
**Course :** Foreign Language **Course code :** 1012
**Prerequisite :** Nil

**Teaching & Examination Scheme:**

| Teaching Scheme | | | | | Examination Scheme | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hrs / week | | | Credits | TH Paper Hrs. | Marks | | | | | | | |
| TH | TU | PR | | | | TH | TEST | TH+TEST | PR | OR | TW | TOTAL |
| -- | -- | 02 | 02 | -- | Max. | -- | -- | -- | -- | -- | -- | -- |
| | | | | | Min. | -- | -- | -- | -- | -- | -- | -- |

**Rationale:**

An engineering technician is likely to come in contact with a representative from / documents in / get employed abroad Japan, France, German. In such situation he must have the background of such languages so that they can understand the related information.

This course is introduced to create facilities at the institute level as the faculty for the same is locally available.

**Objectives:**

THE STUDENT WILL BE ABLE TO

1 Understand at least conversation with foreigners
2 Write in foreign language to some extent
3 Read the language.

**Contents:**

| Topic No. | Topic & Subtopic | Hours |
|---|---|---|
| A | **French Language:** | |
| | 1. Alphabets | 02 |
| | 2. Months / Days / Numbers | 05 |
| | 3. Vocabulary | 07 |
| | 4. Constructing simple sentence | 10 |
| | 5. Speaking | 08 |
| B | **Japanese Language** | |
| | 1. Alphabets in Hiragana | 03 |
| | 2. Alphabets in Katakana | 03 |
| | 3. Words in Hiragana Writing and pronouncing | 05 |
| | 4. Word using both Hiragana and Katakana writing and pronouncing | 08 |
| | 5. Simple Sentences | 08 |
| | 6. Lessons 1 to 4 | 08 |
| C | **German Language** | |
| | 1. Alphabets | 02 |
| | 2. Months / Days / Numbers | 05 |
| | 3. Vocabulary | 07 |
| | 4. Constructing simple sentence | 10 |
| | 5. Speaking | 08 |
| | **Total** | **32** |

**Note:**

1. Students shall select any one language from above languages

**Suggested Instructional Strategies:**

Lecture method, Use of teaching aids.

**Learning Resources:**

**Reference Books:**

| SN | Author | Title | Publisher |
|---|---|---|---|
| 1 | Walter Grauberg | The elements of foreign language | Multilingual Matters |
| 2 | Carl Eduard Aue | Grammer of the German Language | Chambers |
| 3 | de Roussy de Sales | Easy French reader | McGraw Hill |
| 4 | AJALT | Japanes for young peoples-I Student Book | Kodansha International Ltd. |
| 5 | Christopher Kendris, Theodore Kendris | 501 French verbs: with CD ROM | Barron's Best Selling |

**Programme :** Diploma Programme in CE / ME / PS / EE / IF / CM / EL / AE / DD / ID
**Course :** Videography **Course code :** 1013
**Prerequisite :** Nil

**Teaching & Examination Scheme:**

| Teaching Scheme | | | | Examination Scheme | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Hrs / week | | | Credits | TH Paper Hrs. | Marks | | | | | | |
| TH | TU | PR | | | | TH | TEST | TH+TEST | PR | OR | TW | TOTAL |
| -- | -- | 02 | 02 | -- | Max. | -- | -- | -- | -- | -- | -- | -- |
| | | | | | Min. | -- | -- | -- | -- | -- | -- | -- |

**Rationale:**

To learn about the concept of video shooting this course is introduced in the curriculum as non-credit course. This course gives the knowledge about the principals of video shooting.

**Objectives:**

The student will be able to

1. Concept about Arts and aesthetics.
2. Study of different camera.
3. Study of quality and quantity of light required.
4. Difference between the still and video camera.

**Contents:**

| Topic No. | Topic & Subtopic | Hours |
|---|---|---|
| 1 | **Arts and Aesthetics**<br>1.1 Introduction to Art, Visual art and Audiovisual art<br>1.2 Communication History and Theory<br>1.3 Narrative History and Theory<br>1.4 Film History<br>1.5 Film Appreciation<br>1.6 Visit to Museums and Galleries<br>1.7 Types of Films – Fiction, Documentary, Music Video, Talk Show, Live Show. | 02 |
| 2 | **Camera**<br>2.1 Basics of Photography<br>2.2 Pinhole camera<br>2.3 Study of Different types of cameras<br>2.4 Study of lenses, Depth of Field, Angle and Composition<br>2.5 Detailed study of still camera and the mechanism<br>2.6 Use of shutter speed and aperture to get the desired picture.<br>2.7 Study of Camera Support | 03 |
| 3 | **Lighting**<br>3.1 Study of quality and quantity of Light and Shadow<br>3.2 Natural and Artificial lights<br>3.3 Study of flashlight, filters and exposure meter<br>3.4 Three point lighting<br>3.5 Creative lighting | 02 |

| Topic No. | Topic & Subtopic | Hours |
|---|---|---|
| | 3.6 Introduction to basic video camera<br>3.7 Detailed study of video camera and the mechanism<br>3.8 Stop Block technique | |
| 4 | **Programming**<br>4.1 Television Vs Cinema<br>4.2 Intro to Various Television Program Formats<br>4.3 Creative Content Writing<br>4.4 Introduction to Video Camera<br>4.5 Computer application Skills<br>4.6 Difference between the still and the video camera<br>4.7 Aspect ratio and systems of recording PAL, SECAM and NTSC | 04 |
| 5 | **Sound**<br>5.1 Introduction to Sound.<br>5.2 Principles and quality of sound.<br>5.3 Microphones, cables and connectors.<br>5.4 Responses of sound and selection of Mikes. | 02 |
| 6 | **Editing**<br>6.1 Introduction to Editing<br>6.2 Concepts of Editing – travelling through time and space<br>6.3 Montage Theory<br>6.4 Principles of Editing and patterns – Linear, Parallel and Rhythmic | 03 |
| 7 | **Preparation of video documentary** on processing, process, construction operation, mechanical operations. | 16 |
| | **Total** | **32** |

**Suggested Instructional Strategies:**

Lecture method, Use of teaching aids, Hands on work with related equipments.

**Learning Resources:**

**Reference Books:**

| SN | Authors | Title | Publisher |
|---|---|---|---|
| 1 | Eric Deblackmere | Video production Handbook | Dfocus Production |
| 2 | Eric Deblackmere | Picture composition for film and televison | Dfocus Production |
| 3 | Jason Moser & Others | Digital Videography, recording, preserving, & disseminating archaeological | Anne Arundel Country Department |

**Programme :** Diploma Programme in CE / ME / PS / EE / IF / CM / EL / DD / ID
**Course :** Two-Wheeler Maintenance **Course code :** 1014
**Prerequisite :** Nil

**Teaching & Examination Scheme:**

| Teaching Scheme | | | | Examination Scheme | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Hrs / week | | | Credits | TH Paper Hrs. | Marks | | | | | | |
| TH | TU | PR | | | | TH | TEST | TH+TEST | PR | OR | TW | TOTAL |
| -- | -- | 02 | 02 | -- | Max. | -- | -- | -- | -- | -- | -- | -- |
| | | | | | Min. | -- | -- | -- | -- | -- | -- | -- |

**Rationale:**

The use of Two Wheelers is being increasing tremendously. It becomes essential to know the Introduction, Operation and minimum maintenance by every user. The students of this institute, if desires, a facility to learn this course is made available through the Non Exam Credit Course.

**Objectives:**

The student will be able to

1. Understand operation of different two wheelers.
2. Understand various sub systems.
3. Understand maintain them on periodical basis.
4. Understand various setting points of carburetor, brakes, clutches, chains.
5. Use of various tools provided in tool kit received with vehicle.
6. Understand removal of wheels and refitting, pressures to be maintained in wheels.

**Contents:**

| Topic No. | Topic & Subtopic | Hours |
|---|---|---|
| 1 | **The Engine**<br>1.1 Basic Engine Cycle,<br>1.2 Engine Lay outs, Cylinder head for two stroke engine & four stroke engines, valves, valves spring, valve gears, Cylinder barrels for two stroke engine & four stroke engine, connecting rod & crankshafts, gaskets. | 03 |
| 2 | **Engine cooling systems.** | 01 |
| 3 | **Engine Lubrication**<br>3.1 Function of lubrication system, components of lubricating system.<br>3.2 Characteristics of lubricants, Criteria for periodic replacement of lubricant / greasing.<br>3.3 Comparison of lubricating systems used for two wheeler. | 04 |
| 4 | **Clutch:**<br>4.1 Clutch location, Arrangements, Constructional features<br>4.2 Clutch operating mechanisms<br>4.3 Types of clutches | 04 |

| Topic No. | Topic & Subtopic | Hours |
|---|---|---|
| 5 | **Transmission:**<br>5.1 Gear Box, gear box necessity<br>5.2 Construction & layout<br>5.3 Gear selection & mechanisms.<br>5.4 Final drive. | 05 |
| 6 | **Carburetor:**<br>6.1 Basics carburetor, its necessity and requirement of carburetor.<br>6.2 Carburetor circuits & controls<br>6.3 Component of carburetor.<br>6.4 Cleaning of carburetor and its setting<br>6.5 Cleaning air passages. | 04 |
| 7 | **Chassis:**<br>7.1 Chassis structure & layout, Chassis for motorcycle & racing bikes.<br>7.2 Frame structure, types of frame structure used in different models, Front forkes, steering dampers, attachment to frame<br>7.3 Wheels & spokes, arrangement of spokes, tyres, tyre specification, castor provision, steering operation<br>7.4 Mudguards<br>7.5 Exhaust systems<br>7.6 Accessories & safety provision viz. stands, footrests, handle bars, seats, instrument panel. | 04 |
| 8 | **Brakes:**<br>8.1 Necessity and requirements of brake system<br>8.2 Brake operating mechanism in two wheeler<br>8.3 Brake setting<br>8.4 Types of brakes used.<br>8.5 Requirement of brake fluid | 02 |
| 9 | **Electrical System & Accessories:**<br>9.1 Starting mechanism<br>9.2 Charging system, battery & wiring<br>9.3 Ignition system, electronic ignition, Spark plugs & suppressers, hours, light & alignment, flashers, switches.<br>9.4 TFI system, electronic control unit. | 03 |
| 10 | **Trouble shooting & servicing:** of various engine components, problems with transverse engine. Prevention of leakages | 02 |
| | **Total** | **32** |

**Suggested Instructional Strategies:**

Lecture method, Use of teaching aids, Demonstration, Assignment, Case study.

**Learning Resources:**

**Reference Books:**

| SN | Author | Title | Publisher |
|---|---|---|---|
| 1 | Chilton | Chilton's Motorcycle repair manual | Chilton Book Co. |
| 2 | Terry Meany | The Complete Idiots guide to bikes maintenance and repair | Alpha Books |
| 3 | Darwin Holnstron | The Complete Idiots guide to motor cycles | Alpha Books |

**Programme :** Diploma Programme in CE / ME / PS / EE / IF / CM / EL / AE / DD / ID
**Course :** Youth Empowerment and Skills **Course code :** 1015
**Prerequisite :** Nil

**Teaching & Examination Scheme:**

| Teaching Scheme | | | | Examination Scheme | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Hrs / week | | | Credits | TH Paper Hrs. | Marks | | | | | | |
| TH | TU | PR | | | | TH | TEST | TH+TEST | PR | OR | TW | TOTAL |
| -- | -- | 02 | 02 | -- | Max. | -- | -- | -- | -- | -- | -- | -- |
| | | | | | Min. | -- | -- | -- | -- | -- | -- | -- |

**Rationale:**

Education has five aspects – information, concepts, attitude, imagination and freedom. The purpose of education is to prepare a person for life. It is well known fact that the age group of 16-30 years is extremely crucial. This is the age where issues of career, relationships, sex, peer/parental pressures and anxiety about the future all come for the fore simultaneously. For a well-rounded education, it is vital to develop mental clarity on the subject matter. For the youth bogged down by these issues, academic/professional performance and development to their full potential suffers. Youth Empowerment and Skills educates and empowers youth to life challenges as a student and creates professionalism and excellence in their work.

**Objectives:**

The student will be able to

1. Develop sense of belongingness amongst the students.
2. Develop presentation and communication skills.
3. Develop leadership skills and Work in a team.
4. Develop negotiation and decision making skills.
5. Manage the stress and keep physically fit.

**Contents:**

| Topic No. | Topic & Subtopic | Hours |
|---|---|---|
| 1 | Methodology of group discussions and role-playing to inculcate life-skills. | 06 |
| 2 | Team games to develop public speaking and interpersonal communication skills. | 08 |
| 3 | Talks and Presentations to bring out attitudinal and behavioural changes. | 04 |
| 4 | Breathing techniques (like the world-renowned and well-researched Sudarshan Kriya) to flush out stresses and toxins. | 08 |
| 5 | Aspects of Asanas and Pranayama to increase concentration and clarity of mind. | 06 |
| | **Total** | **32** |

**Suggested Instructional Strategies:**

Group discussions, Role play, case study, Team games, demonstrations, lecturers

**Learning Resources:**

Audio/video cd's such as YES+ Video, Love moves the world, 5-H programme, communication, pranayama count

**Reference Books:**

| SN | Author | Title | Publisher |
|---|---|---|---|
| 1 | Sri Sri Ravishankar | Celebrating Silence | Sri Sri Publications |
| 2 | Kishanji Varma | Sri Sri Yoga | Sri Sri Publications |
| 3 | Sri Sri Ravishankar | Punarnava | Sri Sri Publications |
| 4 | Sri Sri Ravishankar | Secret of relationship | Sri Sri Publications |

# ANNEXURES

## Annexure – I

## PROGRAMME - DIPLOMA IN INTERIOR DESIGN AND DECORATION
## SAMPLE PATH
## ENTRY LEVEL- 10+

| Nature of Course | First Year | | Second Year | | Total |
|---|---|---|---|---|---|
| | Odd Term | Even Term | Odd Term | Even Term | |
| Compulsory | 1125 (10) | 1264 (04) | 1474 (09) | 1317 (04) | |
| | 1126 (04) | 1265 (06) | 1476 (07) | 1475 (09) | |
| | 1127 (08) | 1266 (05) | 1583 (10) | 1411 (02) | |
| | 1128 (04) | 1267 (04) | 1316 (04) | 1584 (10) | |
| | 1110 (02) | 1268 (08) | -- | 1318 (05) | |
| | -- | 1269 (07) | -- | 1412 (04) | |
| | -- | -- | -- | -- | |
| **Total credits (Compulsory)** | **28** | **34** | **30** | **34** | **126** |
| **Elective** | -- | -- | I) Any **ONE** from Elective: I : 1585, 1586, 1587 : **(05)** | -- | -- |
| **Total Credits (Elective)** | **--** | **--** | **05** | **--** | **05** |
| **Total Courses** | **05** | **06** | **05** | **06** | **23** |
| **Total Credits (Compulsory + Elective)** | **28** | **34** | **35** | **34** | **131** |
| **Non Examination Credit Courses** | The student has to complete any **TWO** non examination credit courses, one from each group of non examination credit courses before the completion of programme. | | | | **04** |
| **Grand Total of Credits** | | | | | **135** |

**Note: Figures in bracket indicates total credits.**

## Annexure: II

## Rules for Registration and Examination

### Important Rules of Registration for courses.

1. An eligible student must register to minimum three courses and maximum seven courses during each term.
2. While registering for a course at the beginning of a term, a student shouldn't have backlog of more than seven courses of any term as carried over due to failure or any other reason.
3. A student can register for a Project work only after acquiring minimum 65 credits.
4. A student will have to re - register for a course/s if he / she is detained from the course/s for any reason.

### Important Rules regarding Registration for Examination

1. A student can register for examination of only those courses for which he has registered and kept term.
2. A student can register for examination for not more than 11 courses in one examination.
3. A student will have to re-register for examination of theory or Practical / oral of a course if he / she fails in examination.
4. A student will be allowed to re-register for examination in accordance with rules if he / she was eligible to appear for last Examination but he/ she failed to appear last examination for any reason.
5. A student will not be able to cancel his registration after he / she is Registered for examination

### Other Important Rules

1. A candidate will be eligible for the award of diploma when he / she acquires the required number of credits for a Programme and complete two - non examination credits courses.
2. No candidate will be allowed to appear for examination of any course unless the Head of the Department certifies that
   2.1 Attended at least 75% of the prescribed lecture hours, tutorial hours, practical hours or any other kind of work and or assignment for the course as the case may be in conformity with the provision laid down in the course contents.
   2.2 Satisfactorily completed specified laboratory practical, term work prescribed in curriculum for the course.
3. No candidate will be permitted to reappear to any course of any examination in which he has once passed.

**Standard of Passing**

1. Theory, total of theory and periodic test, practical, oral and termwork examination shall be separate head of passing.
2. To pass examination of any course, a candidate must obtain a minimum of 40% marks in each head of passing prescribed for that course taken separately.

**Periodic Test**

1. Two periodic tests will be conducted during each term for the courses as per their examination scheme.
2. Average marks of the two period tests will be considered for each course separately.
3. Reappearing for the periodic test for improvement of marks is not allowed.

**Term Work**

1. Term work is a document submitted by the candidate consisting of report of site / field visit and / or laboratory work and / or drawing sheets / sketch books / jobs / model. Such term work shall be submitted before the end of academic term and it shall be satisfactory in the opinion of concern faculty member, Head of the Department and Principal of Institute.

**Grace Marks**

1. Grace marks shall be applicable if the rules of "standards of passing" are fulfilled.
2. The grace of maximum three marks will be given in either in "Theory marks", or "Periodic test" or "total of theory and periodic test marks", if it falls short by maximum three marks to pass a course.
3. The grace of maximum three marks shall not be applicable twice for the same course. i.e. for "theory" and "total of theory and periodic test" of same course.
4. The grace marks are not applicable to practical, oral, term work examination.

**Award of Class**

| | | |
|---|---|---|
| First Class with Distinction | **:** | 70% or more |
| First Class | **:** | 60% and above but less than 70% |
| Second Class | **:** | 50 % and above but less than 60% |
| Pass Class | **:** | 40% and above but less than 50 % |

**Annexure: III**

**Evaluation Scheme for Project**

**Term Work: Max. Marks: 50 Min. Marks: 20.**

**Progressive Assessment ( Project )**

**Name of the student: Enrollment No. :**
**Term :** II ODD / EVEN
**Programme:** Interior Design and Decoration
**Course :** Project **Code:** 1412 **Project Guide:**

**Title of Project:**

| SN | Project Activities | Date / Week | Leader ship | Understanding | Observation &Accuracy | Contribution | Timely Completion | Total | Signature of Student | Signature of Guide | Signature of HOD |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 5 | 5 | 5 | 5 | 5 | 25 | | | |
| 1 | Formation of team & finalization of project | 1 | | | | | | | | | |
| 2 | Submission of synopsis**:**by each group | 2 | | | | | | | | | |
| 3 | Project activity plan | 3 | | | | | | | | | |
| 4 | Maintenance Project Diary | 6 | | | | | | | | | |
| 5 | Visits to Industries / Institutions / Market | 7 | | | | | | | | | |
| 6 | Collection of Data / Survey | 9 | | | | | | | | | |
| 7 | Analysis and Presentation of data. | 10 | | | | | | | | | |
| 8 | Pre submission seminar | 13 | | | | | | | | | |
| 9 | Presentation of Rough Work**:**hand written | 14 | | | | | | | | | |
| 10 | Final Project Report**:**Submission | 15 | | | | | | | | | |
| | Total by Internal**:**out of 250 | | | | | | | | | | |

The Term Work**:** Convert the total given by internal to "out off 30".

Signature of Project Guide

**Seminar & Project assessment:**

| **Term Work** | | | | **Oral** | | |
|---|---|---|---|---|---|---|
| Seminar | Project | | Total | Internal | External | Total |
| Internal | Internal | External | | | | |
| 20 | 10 | 20 | 50 | 25 | 25 | 50 |
| | | | | | | |

## Annexure: IV

## Programme Wise Committee (PWC) – Interior Design and Decoration

**The structure of PWC consists of following members**

| Sr. No. | Particulars | PWC Post |
|---|---|---|
| 1 | Head of the Department of Interior Design and Decoration, Government Polytechnic, Nashik | Chairman |
| 2, 3 | Two Senior Lecturers from Interior Design and Decoration, Government Polytechnic, Nashik | Member |
| 4 | One expert in the Programme from the neighbouring Institution | Member |
| 5 | Nominee of the Maharashtra State Board of Technical Education, Mumbai | Member |
| 6 | One expert from the local Industry | Member |
| 7 | In Charge of Curriculum Development Cell | Member Secretary |

**Meetings of PWC for approval of Curriculum - 2011 Contents:**

The contents of Curriculum - 2011 of Diploma Programme in Interior Design and Decoration are approved in the various meetings of PWC held on

## Annexure: V

## Board of Studies (BOS)

**The structure of BOS consists of following members**

| Sr. No. | Particulars | BOS Post |
|---|---|---|
| 1 | Representative of the Industry | Chairman |
| 2 to 11 | Head pf Department of each Programmes CE/ME/PS/EE/IF/CM/EL/AE/DD/ID | Member |
| 12 to 21 | Local experts of each Programmes CE/ME/PS/EE/IF/CM/EL/AE/DD/ID | Member |
| 22 | Nominee of the Maharashtra State Board of Technical Education, Mumbai | Member |
| 23 | In Charge of Curriculum Development Cell | Member Secretary |

**Meetings of BOS for approval of Curriculum - 2011 Contents:**

The contents of Curriculum - 2011 of Diploma Programme in Interior Design and Decoration are approved in the various meetings of BOS held on 02-07-2011 & 25-04-2012.

## Annexure: VI

## Governing Body (GB)

**The structure of GB consists of following members**

| Sr. No. | Particulars | GB Post |
|---|---|---|
| 1 | Joint Director of Technical Education, Nashik Region, Nashik | Chairman |
| 2 | Nominee from Western Regional Committee. Govt. of India. | Member |
| 3 | Coordinator, NITTTR, Extension Centre, Pune | Member |
| 4 | Representative from Nashik Industrial Manufacturing Association(NIMA). | Member |
| 5 | Representative from District Industries Centre, Nashik | Member |
| 6 | Principal, Government Polytechnic, Aurangabad. | Member |
| 7 | Chairman of the Local Centre of Institute of Engineers (India) | Member |
| 8 to 12 | Representative from Industry | Co-opted Members |
| 13 | Principal, Government Polytechnic, Nashik | Member Secretary |

**Meetings of GB for approval of Curriculum - 2011 Contents:**

The contents of Curriculum - 2011 of Diploma Programme in Interior Design and Decoration are approved in the various meetings of GB held on 29-07-2011 & 25-05-2012.