
ST. TERESA'S COLLEGE, ERNAKULAM
(AUTONOMOUS)

Affiliated to Mahatma Gandhi University, Kottayam



CURRICULUM FOR
DIPLOMA PROGRAMME
IN INTERIOR AND EXTERIOR SPACE
DESIGNING

Under Choice Based Credit & Semester System
& Outcome Based Education

(2020 Admissions)

PROGRAM SPECIFIC OUTCOMES

PSO1: Recognize & comply with safe working practices, energy and environment conservation and Eco-friendly and sustainable practices in the construction field.

PSO2: Interpret specifications and apply it in the field of work such as drawing for Interior and Exterior Planning and Construction using Dimensioning, Layout, Representation methods, Symbols, Projections, Assembly drawing, Sectional views and Estimations.

PSO3: Draw building service detailing for commercial and residential interiors and prepare submission drawings for sanctions by using CAD and selection of different building materials judiciously after properly analysing them for the construction.

PSO4: Manage official communication in relation to work and related activities, and effectively manage client relations and publicity.

PSO5: Manage the personnel and income and accounts of an enterprise and organize the related tasks in day to day work of an organization for personal & societal growth.

SEMESTER I

Course Code	Course Title	Credits	Course Type
VID1G01D20	English for Communication-I	5	Common Course I
VID1G02D20	Office Management- IT skills, and Bookkeeping	3	Common Course II
VID1G03D20	Basics of Design Theory	4	Core Course
VID1SP01D20	Fine Arts and Crafts (Practical)	5	Skill Practical
VID1SP02D20	Basics of Technical Drawing	5	Skill Practical
VID1SP03D20	Technical Drawing Practice (Practical)	5	Skill Practical
VID1SI01D20	CAD Training (Internship)	3	Skill Internship

SEMESTER I

COMMON COURSE I - GENERAL EDUCATION COMPONENT

VID1G01D20 ENGLISH FOR COMMUNICATION- I

Credits : 5

Total Lecture Hours : 90

Course Outcomes :

CO1: Create positive group communication exchanges through proper application of vocabulary and grammar.

CO2: Identify the main ideas and provide supporting details in academic listening and presentation.

CO3: Comprehend English language

CO4: Manage the reading speed in order to comprehend articles of academic importance.

CO5: Write and speak effectively at an interpersonal level

CO6: Pinpoint the different forms of communication to be applied to different contexts

Mapping of Course Outcomes with Program Specific Outcomes

Mapping	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	1	2	2	2	2
CO2	2	2	2	3	2
CO3	2	2	2	3	2
CO4	2	1	1	2	2
CO5	1	1	1	3	3

CO6	2	2	2	3	3
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Syllabus Content:

Module I: Learning English (15 Hours)

The importance of English, uses of English; vocabulary-using a dictionary; Synonyms; Antonyms

Module II: Essentials of English Grammar (25 Hours)

Sentence- Types of Sentences- Phrases; Articles- Paragraph Writing – Topic Sentences, Supporting Sentences, Concluding Sentences - Parts of Speech- Noun, Verb, Adjectives, Tenses, Modal Auxiliaries, Prepositions, Conjunction – Punctuation - Passive and Active Voice - Reported Speech – Prefixes – Suffixes

Module III: Listening and Reading (20 Hours)

Barriers to Listening – Academic Listening - Reading Stories – Reading Newspaper

Module IV: Practical (30 hours)

How to use a Dictionary - Listening Comprehension- Engaging in Conversations - Descriptive Writing

SEMESTER I

COMMON COURSE II - GENERAL EDUCATION COMPONENT

VID1G02D20 OFFICE MANAGEMENT-IT SKILLS AND BOOKKEEPING

Credits : 3

Total Lecture Hours :54

Course Outcomes

CO1: Exercise accounting and record keeping for efficient office management.

CO2: Apply basic computing tools such as MS Office excel and PowerPoint effectively in work management

CO3: Operate internet, E-mail, websites etc in business communication and publicity

CO4: Develop online and offline content for promotion and portfolio management

Mapping of Course Outcomes with Program Specific Outcomes

Mapping	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	1	2	2	3	3
CO2	1	1	1	3	3
CO3	1	1	1	3	3
CO4	1	1	1	3	3

Syllabus Content:

Module I: Introduction to office management (10 hours)

- Definition and components of office management
- Planning and scheduling of office work
- Office administration

Module II: Financial Management (10 hours)

Book keeping - Book keeping (Single and Double entry system), Books of Accounts, Journal, ledger, trial balance, balance sheet, Components of Cost, break even, profit analysis, Budget, Importance of Cost control, Methods of controlling cost.

Accounting and Record maintenance: Basic principles of accounting, assets, liabilities, cost accounting, material management, stock checking; Need, objectives, and types of records - Classification and indexing

Module III: IT literacy and skill enhancement (10 hours)

Basics of Computer, Basics of Operating System, WINDOWS, User interface of Windows OS, Use of External memory like pen drive, CD, DVD etc., Use of common applications- Mail id creation. Word Processing and Worksheet: Basics of Excel worksheets, creating simple worksheets, use of simple formulas and functions. Google Apps – Google Doc, Google form etc.

Module IV: Computer Networking and Internet (10 hours)

Basic of computer Networks (using real life examples), Definitions of Local Area Network (LAN), Wide Area Network (WAN), Internet, Concept of Internet (Network of Networks), Meaning of World Wide Web (WWW), Web browser, Website creation, Web page and Search Engines. Social media sites and its implication. Information Security and antivirus tools, Dos and

Don'ts in Information Security, Awareness of IT Act, types of cyber-crimes.

Module V: Related Experiences: (14 hours)

- Planning and scheduling of office work
- Preparation of income and expenditure account
- MS. Word, Excel, PowerPoint creation, use of mail, simple website development
- Audio visual presentations
- Visit to an Architecture office, KINFRA Park etc

SEMESTER I

CORE COURSE: GENERAL EDUCATION COMPONENT

VID1G03D20 BASICS OF DESIGN THEORY

Credits : 4

Total Lecture Hours : 72 hours

Course Outcomes

CO1: Use the concepts of Art, Design and Good taste in design.

CO2: Identify and adopt appropriate ancient designs on present day designing

CO3: Create compositions with design elements and principles.

CO4: Administer colour and lighting style judiciously for interior designing.

CO5: Design special effects and illusions using elements and principles of design in space imaginatively

Mapping of Course Outcomes with Program Specific Outcomes

Mapping	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	1	2	2	1	1
CO2	3	2	1	1	1
CO3	1	3	2	1	1
CO4	2	3	3	1	1
CO5:	3	2	2	1	1

Syllabus Content

Module I: Art and Design in Daily Living (10 hours)

Art – Definition, Classification; Design-Definition and Purpose, Difference between Art and Design, Importance of Good Taste, Design Types and Sources-Characteristics–Functional, Structural and Decorative and Ideas of design. Types: Naturalistic, Rustic, Ancient, Traditional, Historic, Period, Stylized, Geometric, Modern, Abstract, Mobile

Module II: Principles and Elements of Design (15 hours)

Elements of design- Line, Shape, Form, Texture, Colour, Pattern, Light and Space, Alteration of Elements of Design, Application on 2-D and 3- D surfaces Principles of design - Proportion, harmony, emphasis, balance, rhythm etc. Application of various types of design, elements of design and principles of designs

Module III: Special Effects and applications using design elements (10 hours)

Optical Illusions, Illusions for Space Enhancement, Motif Development and Pattern Creation, Application of motif in objects suitable for interiors.

Module IV: Colour (12 hours)

Understand colour vocabulary and terminology- Develop a sense of colour combination, after effects of colour. Types of colour schemes based on the colour wheel, colour theory, colour characteristics, colour schemes, Exercises in informed application of basic colour properties and harmonies. Understanding the psychology of colour perception.

Module V: Lighting (10 hours)

Importance of Home Lighting, Types of Lighting- Natural and Artificial - Importance of Natural Lighting for Healthy Environment; Types of Lamps and Lighting Fixtures for Artificial Lighting; Physical and Psychological Aspects of Lighting

Module VI: Design History (15 hours)

Introduction and basics of ancient and modern art and architecture — Greek, Roman, Egyptian, Chinese, Gothic, Renaissance, Indian, etc, and its influence on current designs process, History of Interior Design in India and Abroad, Introduction to Vaastu and Feng Shui.

Practical / Related Experiences:

Students should maintain a record of all the design activities practised during the semester. The record has to be certified by the instructor in charge and to be presented for the end semester practical examination

SEMESTER I

SKILL COMPONENT

VID1SP01D20 FINE ARTS AND CRAFTS (PRACTICAL)

Credits : 5

Total Lecture Hours : 90 hours

Course Outcomes:

CO1. Prepare illustrations using various media and materials.

CO2. Establish proper eye and hand coordination in studio and field observation.

CO3. Determine proportion, scale, and spatial relationships

CO4. Evolve new design concepts through experimentation using principles of visual composition.

CO5. Apply three-dimensional design for 2 Dimensional compositions.

CO6. Create innovative techniques of drawings and crafts.

Mapping of Course Outcomes with Program Specific Outcomes

Mapping	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	2	3	3	1	1
CO2	2	3	3	1	1

CO3	2	3	3	1	1
CO4	2	3	3	1	1
CO5	1	2	2	1	1
CO6	2	2	2	1	1

Syllabus Content:

Module I: Free Hand Drawing (15 hours)

- Indoor and outdoor sketching: of existing objects, in pencil and pen /ink.
- Free-hand sketches of simple objects perspective drawing and rendering of imagined objects, in pencil and pen /ink.
- Study of the principles of visual composition in historic architecture, art and design.
- Introduction to the basic formal concepts in the two-dimensional arts and aesthetic organization from observation of contemporary examples of design
- Using Line, plane and volume as a means to express objective and spatial concepts in various media

Module II: Drawing & Painting: (15 hours)

- Foreshortening, perspective, eye-level, fixed point of Vanishing point, ratio- proportion, sketching, drawing light and shade, Still life objects and live models - anatomy, landscape, vertical, horizontal, two and three-dimensional, transparent and opaque.
- Materials: Paper (Cartridge, Hardboard, Handmade, etc.) Pencil, water, acrylic colour, transparent (Any 2)

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- Media of Composition: Collage, Mosaic, Painting, Mural, Fresco, Batik, Tie and Dye (Any 2)
 - Exercises in the various painting mediums- watercolour, acrylic, oil etc. (Any 2)

Module III: Rendering and Colouring exercises (15 hours)

- Rendering with pencil and pencil colour.
- Draft the Interior space design with the help of colour scheme, observing the basic historical and contemporary aspects of colour. Critical thinking and problem-solving skills by the use of colour through visual media, Drawings in colour with the use of light and shade, material textures and tonal values
- Proportion and tonal value explorations in the observational study of room settings.

Module IV: Sculpture and Modelling techniques (15 hours)

- 3-dimensional design and concepts. Sculpture, modelling with clay, terra-cotta, carving in Wood, stone, plaster of Paris.
- Techniques and fabrication by the use of materials such as plaster, wire, clay, wood, paint, board, paper, etc.
- Model making of simple and complex objects

Module V: Graphics and Applied Art (15 hours)

- Graphics: Technical skills related to graphics, relief printing, etching, silk screen printing, Cut and paste methods, design idea generation, Graphic symbols in interior spaces
- Applied Art: Book cover design and illustration, cartoon, POP ART, poster, advertisements, animation and printing processes, photography, computer-graphic, hoarding and T.V (Any 2), Explore ideas, form, content and meaning through various modes of art and design- photography, photomontage, collage, audio-visual projections, animations etc. **(Any 2)**

Module VI: Design Theory interpretations through student projects (15 hours)

- 3-dimensional design and creative ideas to help foster artistic awareness.
- Creation of art objects– collage work, flower making, decoupage, macramé, papier mâché, greeting cards, glass painting, candle making, pot painting, quilling, etc. Wealth from junk- through Reuse, Reduce, Recycle, Upcycle etc.
- Portfolio Assessment: The Art Portfolio will consist of a compilation of all art works, from sketch to finished product. (Any 1 from each module)

SEMESTER I

SKILL COMPONENT

VID1SP02D20 BASICS OF TECHNICAL DRAWING (PRACTICAL)

Credits : 5

Total Lecture Hours : 90 hours

Course Outcome:

CO1: Operate various drawing instruments.

CO2: Visualize and render engineering technical drawings.

CO3 : Create basic plans and views of interior spaces.

CO4: Develop attractive visual presentations of interiors.

CO5: Identify and use graphic symbols and abbreviations as per requirements.

Mapping of Course Outcomes with Program Specific Outcomes

Mapping	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	1	3	3	1	1
CO2	2	3	3	1	1
CO3	2	3	3	1	1
CO4	1	3	3	2	1
CO5	2	3	3	2	1

Syllabus Content:

Module I: Interior designing & drawing Tools and Instruments (10 hours)

- Identifying of drawing instruments, layout of drawing sheets by doing small exercises in interior. Tools, equipment & instruments for Design drawing -drafting board, T scale, mini drafter (M.D), Set Square etc. and other small tools and materials
- Recognize & Layout of drawing sheet including title card

Module II: Graphic symbols and abbreviations in design drawing (15 hours)

- Introduction to Indian standard institution
- Introduce the scale MKS and FPS for making the drawing – reduced and enlarged scale drawings
- Lettering- styles and fonts
- Standard sizes & measurements of various interior spaces like (Kitchen, toilet, Bed Room, Living Room, Dining etc.
- Graphics used for interior- Graphics symbols for Door, windows and furniture of different material.
- Ergonomics For space planning, Anthropometric measurements required for space planning.

Module III: Code of practice for general interior drawing. (15 hours)

- Introduction & Importance of lines - Different types of lines
- Projection techniques - Types - Orthography, Metric Drawings / Parallel projection, Oblique, o Axonometric, Isometric
- Functional planning - Preparation of Bubble diagram, Flow of Circulation chart, Line drawing, Drawings to Scale, Working drawings – Elevation and Sections
- Planning and designing of spaces with furniture layout, basic layout of furniture space planning and layout.

Module IV: Free hand and Scaled Drawings (15 hours)

- Introduction to Free hand sketches of graphic symbols.
- Free hand sketches of Graphic symbols for door windows, furniture, plumbing & sanitary, electrical, landscape
- Basic knowledge of geometrical shapes - Draw the simple composition of geometrical objects with help of scale. Draft the plan, elevation & sectional elevation & isometric view of geometrical solids- Cube, Cuboids, Triangular prism, Cylinder, Pyramid, Hexagonal prism, Hexagonal Pyramid, Cone

Module V: Interior Design Methodology (15 hours)

Design Communication and Representational Techniques: Visualization, Creation of Mood and Illusion, Model making, Presentations to sell ideas and concepts

Module VI: Practical / Related Experiences: (20 hours)

Students should maintain a record of all the design activities practised during the semester. The record has to be certified by the instructor in charge and to be presented for the end semester practical examination

SEMESTER I

SKILL COMPONENT

VID1SP03D20 TECHNICAL DRAWING PRACTICE (PRACTICAL)

Credits : 5

Total Lecture Hours : 90 hours

Course Outcomes:

CO1. Present interior designs using drawing instruments and tools

CO2. Sketch basic and complex geometrical shapes.

CO3. Use engineering scale and free hand sketches in projection techniques

CO4. Create furniture design and generate drawings of detailing.

CO5: Design appealing residential Interior drawings with accuracy.

Mapping of Course Outcomes with Program Specific Outcomes

Mapping	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	2	3	3	1	1
CO2	2	3	3	1	1
CO3	2	3	3	2	1
CO4	1	3	3	1	1
CO5	2	3	3	2	2

Syllabus Content

Module I: False Ceiling & Partition (10 hours)

False Ceiling & Partition Making -Materials used for false ceiling. Types of partition wall- wooden, glass. Materials used for partition. Drawings of false ceiling.

Module II: Flooring & Panelling (10 hours)

Types of floor finishing- method of constructing, mosaic, brick tiled etc. used in floors. Flooring & Panelling Drawing details –tiled, timber, pattern, stone, mosaic, glass, carpets. Details of wooden Panelling.

Module III: Paints & Polishing (10 hours)

Polishes - Different types classification and their application on woods. Paints & Polishing, Design the Painting of walls and ceiling with colour, Design the painting of doors and windows.

Module IV: Interior services (15 hours)

Plumbing and water supply -Types and components- pipelines house drainage, sanitary fittings, Planning of plumbing. Preparation of drawing showing various pipe joints, method of sanitary fittings in buildings.

Lighting: Types of Lighting system in different spaces of interiors, Air conditioner - Types of air conditioning.

• Note: - Necessary practical training will be carried out on site.

Module V: One and two points perspective Projections (15 hours)

Perspective projection - Definition and theory- i. Ground plane ii. Station point iii. Picture plane iv. Horizontal plane v. Ground line vi. Horizontal line or eye level, vanishing point.

• 1 point ii. 2 point iii. 3-point (Describe the one-point perspective with approximate method) Draft one-point perspective view with approximate method (any room) and render it with any medium, Perspective view of furniture which is used in Interiors, one-point perspective and two-point perspective like Bed Room, Drawing Room, Kitchen, Bathroom & Staircase.

Module VI: Residential Project (15 hours)

- Plan Layout: Introduction of Residential project – Planning of Residential interior - planning of residential building in small scale
- Estimate and costing of different types of material
- Detail layout plan, elevations, sections and views
- Application of orthographic and metric drawings in residential design

Module VII: Workshop Calculation and Science (15 hours)

- Units & Measurements- FPS, CGS, MKS/ SI unit, unit of length, Mass and time.
- Fundamentals and derived units Conversion of units and applied problems.
- Building materials: Types, Functions and Properties-Physical & Mechanical, Types - Ferrous & Non-Ferrous, the latest materials for Interior finishing
- Mass, Weight and Density, Ratio & Proportion, Percentage: Introduction, Simple calculation.

SEMESTER I

SKILL COMPONENT

VID1SI01D20 COMPUTER AIDED DESIGN (INTERNSHIP TRAINING)

Total Hours : 3 hours / week

Course Credit : 3

Course Outcomes

CO1. Operate computer for interior designing.

CO2. Draft basic objects using CAD.

CO3. Prepare 2 D and 3D objects with CAD.

CO4. Create drawings of different types of false ceiling and joinery using CAD.

Mapping of Course Outcomes with Program Specific Outcomes

Mapping	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	1	3	3	2	1
CO2	1	3	3	2	1
CO3	1	3	3	1	1
CO4	1	3	3	1	1

Syllabus Content

Module I: Create objects in 2D & 3D using toolbars, commands. (10 hours)

- Drawings in 2D Construction line, Ray, Points. Polyline, Join, Explode.
- ORTHO, OSNAP, GRID, POLAR, TRACKING, SNAP, Dynamic Input.
- Move, Copy, Copy Array Rotate –Copy Rotate, Rotate reference. Scale- Copy Scale, Scale Reference.
- Offset- Through. Mirror, Stretch, Trim, Extend, Layers, Layer Tools, Colours, Line types, Line Weights, Match Properties Tool Palettes,
- Design Centre Data Extraction Text: Single line text, multi-Line text, Text styles. Text Align, Fields Multiline Text Options. TXT2MTEXT.
- Dimension: Dimension style, Scale Factor, and Scale Factor in Primary Units, Tolerance. Leaders & Multi Leaders

Module II: Preliminary Drawing in 3D (10 hours)

- 3D commands and use of different menus.
- Elementary commands and menus of 3D software,
- Drawing practice on 3D software

Module III: Draw different types of false ceiling by using CAD. (10 hours)

- Ceiling Definition of false ceiling to understand the job fabrication installation process of false ceiling with Gyp board / POP board / Ply / Wood Types of ceiling - Grid, Coffered, Cove.
- Plain Finishing materials used for false ceiling- Laminate, veneer, stone, glass, acrylic sheet, MDF, paints, wall paper, fabric, stainless steel, wood.
- Design a false ceiling in a room, specify the level and section and finishing material (laminate, veneer, paints).

Module IV: Draw different types of flooring by using CAD. (10 hours)

Types of floor finishing: Stone, Marble, Mosaic, Vinyl, Vittrified tiles, Ceramic tiles, PVC, Carpet, Laminated, Glass

Preparing of drawing, Design a flooring pattern with finishing material (Marble, vittrified tile, PVC. Laminated), Specify the starting point of flooring, Specify the dimension & sizes)

Module V: Draw different types of carpentry joints by using CAD. (10 hours)

Carpentry joints Types of joints: Butt joint, Mitre joint, Lap joint, Mortise and Tenon joint, Tongue and groove joint, Housed joint

1. Cross joints used in furniture joints used in doors/ windows/ ventilators.
2. Model of Carpentry joints: - Demonstration of staircase with the help of respective models

Module VI: Draw different types of carpentry joints by using CAD. (10 hours)

Drafting simple joints used in furniture: Drafting details drawing of different types of joints, Draft a sheet of door, window, chair, table, bed (Any 3)

Module VII: Internship: (48 hours)

Introduction to CAD in Trade Theory and Practice on CAD with basic command in Trade Practical 3 hours per week are to be imparted throughout the semester.

- Expert lectures may be organized at regular intervals and when required.
- More emphasis to be given on video/real-life pictures during theoretical classes.
- Some real-life pictures/videos on the topics taught in this semester may be shown to the trainees to give a feel of industry & their future assignment.
- Students should maintain a record of all the practical work