



UNIVERSITY OF CALICUT

Abstract

Faculty of Engineering - Regulations, Scheme & Syllabus of Diploma in Interior Design & Visualization (DIDV) through the School of Distance Education, University of Calicut – approved – With effect from 2014-2015 academic year onwards - Implemented – Orders issued

G & A - IV - E

U.O.No. 8849/2014/Admn

Dated, Calicut University.P.O, 11.09.2014

- Read:-*1.Letter No.24736/SDE-A-ASST-3/2014/CU dt. 24.03.2014 from the Director, School of Distance Education, University of Calicut.
- 2.Minutes of the meeting of the Board of Studies in Architecture held on 20.05.2014 (item No. 2).
- 3.Minutes of the Faculty of Engineering held on 25.06.2014 (item No.2)
- 4.Orders of the Vice Chancellor in the file No.8386/GA-IV-E1/2013/CU dt. 01.09.2014 & 09.09.2014 respectively.

ORDER

As per paper read 1 above, the draft Regulations, Scheme & Syllabus of **Advanced Diploma in Interior Design & Visualization** forwarded by the Director, School of Distance Education to be conducted through the School of Distance Education, University of Calicut was forwarded to the Chairman,Board of Studies in Architecture for consideration and approval by the Board.

Vide paper read 2 above, the Board of Studies in Architecture at its meeting held on 20.05.2014 vide item No. 2, scrutinized the regulations, scheme & syllabus of the said course and resolved to modify the course as **Diploma in Interior Design & Visualization instead of Advanced Diploma in Interior design & Visualization** and approved the same with modifications.

Vide paper read 3 above, the Faculty of Engineering at its meeting held on 25.06.2014 vide item No.2), approved the above resolution of the Board of Studies in Architecture held on 20.05.2014.

The Vice Chancellor, considering the exigency and exercising the powers of the Academic Council, has approved and accorded sanction to implement the Regulations, Scheme & Syllabus of the course Diploma in Interior Design & Visualization (DIDV) through the School of Distance Education, University of Calicut With effect from 2014-2015 academic year onwards, subject to ratification by the Academic Council, vide paper read 4 above.

Sanction has therefore been accorded for implementing the **Regulations, Scheme & Syllabus of Diploma in Interior Design & Visualization (DIDV)** through the School of Distance Education, University of Calicut With effect from 2014- 2015 academic year onwards.(The Regulations, Scheme & Syllabus are available in the University website.)

Orders are issued accordingly

Muhammed S
Deputy Registrar

To

The Director, School of Distance Education, University of Calicut.

Copy to :-

PS to VC/PA to PVC/PA to Regr/PAtO CE/EX Section/EG1 Sn/Chairman, BOS in Architecture/Dean, F/Engg/System Administrator (With a request to upload the U.O. and the Regulations, Scheme and Syllabus of the course in the University Website)/SF.

Forwarded / By Order

Section Officer

**Diploma in Interior Design & Visualization (DIDV)
under school of distance education/private mode
REGULATIONS, SCHEME AND SYLLABI
(with effect from 2014-'15 academic year onwards)**

1. Objective The prime objective of Diploma in Interior Design & Visualization is to introduce the students to the evocative association that exists between man and his aesthetically meaningful space. Students will be trained on appreciation of design, lighting and colour, and provided with technical skills to create unique spaces. On successful completion of this one year diploma programme, the student will learn to convert their ideas from conceptual drawings to detailed building specifications and technical drawings of practical projects which will challenge them to find creative, functional solutions to a variety of briefs

2. Course Duration

The programme shall be of Twelve Months duration

3. Eligibility for Admission

Candidates who have passed Pre-degree/Pre-university/Plus two course with not less than 45% marks in aggregate shall be eligible to apply for admission to the DIDV programme. Relaxation of 5% marks will be allowed to candidates belonging to socially and educationally backward communities as referred to by Govt. of Kerala. SC/ST candidates need have only a pass in their qualifying examinations. Those awaiting results of their qualifying examinations also can apply. But such candidates will be admitted provided they produce the marks sheets of the qualifying examination on or before the date prescribed for admission.

3.1 Admission Criteria Admission to the Programme shall be based on the marks secured by candidates in the qualifying examinations. Candidates who have diploma/certificate courses in Interior Design/ Civil/ fine arts will be given weightage as indicated below provided they produce relevant certificates.

1. Diploma in Interior Design/Civil/Fine arts subjects of 10 months duration or more 5 marks
2. Certificate/short term courses in Interior Design/Civil/Fine arts subjects 3 marks

Candidates will be given weightage in only one of the categories, whichever is highest. To earn weightage candidates should produce relevant certificates.

3.2 Course Requirements Students should attend the prescribed lecture and practical sessions without fail and should submit their assignments, practical work and projects in the prescribed mode within the deadlines. Those who fail to put in 75% attendance in both the lecture and practical sessions will not be permitted to appear for the course-end examinations. The University can however condone the shortage of attendance as per the rules and procedures framed by it from time to time. The Head of the institution where the course is being offered shall certify as to the completion of the course requirements of the students before they are admitted to the examination.

3.3 Assessment and Examinations Students shall be assessed continuously through theory/practical assignments by their faculty. There shall also be a course end University examination to be held at the notified examination Centers by the University. The duration of semester-end examination shall be of 3 hours for both theory and practical components. While theory component evaluation will be carried out by external examiners, the practical and projects will be evaluated by two examiners – one external and one internal as nominated by the University.

3.4 Pass Minimum

A candidate who secures not less than 40% marks in a subject at the Final University examinations and not less than 50% of the total marks assigned to the subject, shall be declared to have passed the examination in that subject.

3.5 Classification of successful candidates

1. A candidate who qualifies for the diploma, passing all the subjects of the final university exam not less than 75 % marks of the aggregate total marks of all the subjects assigned to the university examinations and internal evaluation shall be declared to have passed the examination in First Class with Distinction.
2. A candidate who qualifies for the diploma, passing all the subjects of the final university exam not less than 60 % marks of the aggregate total marks of all the subjects assigned to the university examinations and internal evaluation shall be declared to have passed the examination in First Class.
3. All other successful candidates shall be declared to have passed the examination for their diploma in Second class

Courses of Study and Scheme of Examinations

4. The DIDV Programme is structured to provide a sound grounding in theoretical and practical areas of Interior Design & Visualization. The courses and the scheme of assessment are as follows

Subject of Study and Scheme of Examination

S.No.	Sub.Code	Subject	Credits	Marks			Duration of Exam
				Internal	External	Total	
1	DIDV14.01	Architectural Graphics	3	30	70	100	3
2	DIV14.02	Basic Design and Aesthetics	3	30	70	100	3
3	DIDV14.03	Interior Design Materials and applications	2	30	70	100	3
4	DIDV14.04	Interior working drawing and detailing	2	30	70	100	3
5	DIDV14.05	Building services	2	30	70	100	3
6	DIDV14.06(P)	Design Visualization	2	50	50	100	3
7	DIDV14.07 (P)	Project	4	100	100	200	
		Total				800	

1. Centers approved by the University for the Conduct of the Programme through distance education mode, are to arrange for six contact sessions, each session devoted to one paper in the order as listed in the Subjects of Study and scheme of Examination in one contact session, the prescribed lectures and practices of one paper should *be* completed. Each contact sessions should spread across a minimum of 30 days or so in order to enable students to understand the subject and learn the skills at a leisured pace.
2. The Faculty of the approved Centre should give the prescribed number of (1) Take- home Assignments in papers I-V and (2) Practical/studio Work Assignments in each of the papers 1, 2, 4 and 6. The Take Home Assignments should be of theoretical nature to assess students understanding of the concepts dealt under various topics of the papers. And the Practical Assignments should gauge student's ability to ~~can~~ carry out tasks involved in the ~~creation~~ of multimedia products.

The deadline for the submission of Take- Home Assignments and Practical work Assignments should be before the beginning of the contact session for the next paper. Every Student should submit the Take- home assignments of each paper in a record book within the prescribed deadline. The Practical Work/studio Assignments should be submitted in CDs/DVDs or drawing sheets as the case may be..

The assignments should be valued by the faculty. The maximum marks for each assignment could be 25. A consolidated marks sheet in respect of the Take- home Assignments and Practical Work Assignments showing the marks of each of the students should be prepared and sent to the University within the prescribed date.

The assignment, record book and practical work CDs, DVDs should be made available to the external examiners for verification.

There shall be a Course-end examination to be conducted by the University in both the practical and theory areas as per the Subjects of Study and Scheme of Examination. The examination shall be conducted at the Centers notified by the University for the purpose. External examiners appointed for the purpose by the University will conduct practical examination and evaluate the practical.

For paper DIDV14.07 - Projects, there should two contact sessions- Project Approval Sessions and mid project session. Proposals for Project 1 and 2 should be approved in the first session. The second session is meant to monitor the progress of project work. They should work on the approved project and submit the projects in CD format/drawing sheets as the case may be.

The projects are to be evaluated by two external examiners appointed by the University for the purpose.

DIDV14.01 Architectural Graphics

Module I

Introduction to pencil exercises – Knowledge about usage of different points of pencils, handling of pencils, practicing lines and tone building exercises.-- Introduction to drawing equipment and drafting procedure.-Understanding and use of different scales-reduction and enlargement of drawings on different scales. Architectural symbols – representation of building elements, openings, materials, accessories etc. landscape elements such as trees, indoor plants, planters, hedges, foliage, human figures in different postures, vehicles, street furniture etc.-Sketching-Interior still life, individual pieces of furniture, Understanding Depth, light, Shade , Shadow etc.

Module II

MEASURED DRAWING: Measured Drawing of Simple objects like Cupboards, furniture etc. Isometric View: like Tables, Chairs, Cylindrical & Spherical elements etc.Axonometric View: like Interior views for living room, Toilet, Dining Room etc.

Module III

Principles and methods of orthographic projection(first angle projection)Orthographic projections of simple,complex solids and hollow objects.-Preparing Presentation & Technical Drawings (plans, elevations and sections)-Drawings to scale-Furniture, Class room plan, Doors, Windows etc.

Module IV

Introduction to presentation/rendering techniques-Isometric and oblique views. Principles of perspective and visual effects of three dimensional objects. Principles of Drawing One point perspective. Free hand sketching of room interiors.

References :

Architectural Graphics By Francis D. K Ching
Engineering Drawing By Prof.P.I. Varghese
Interior Design Visual Presentation By Moureen Milton
Francis D.K.Ching - Architecture - Form Space and Order

DIDV14.02 Basic Design and Aesthetics

Module I

Interior Design and Decoration-Understanding design and decoration, Role of Interior Designer. General understanding of Interior Design and integration with architecture, Importance of design - Optimisation, Economics, Time, Maintainability, Multiplicity, Interest of user with respect to economy, comfort, safety, security, etc,

Module II

Tools of Interior Design-Elements of design - Point, Line, Shape, Form, Color and colortheory, Texture and Pattern.

Principles of Design - Balance, Emphasis, Rhythm, Harmony, Scale and Proportion .

Gestalts principles of psychology

Module III

Ergonomics- Its study - Postures, Anthropometrics, Biomechanics Zoning, Grids, Modulation of space within and without, enveloping space within the room and furniture

Aesthetical design consideration - Physical such as touch, smell, hearing, etc; Social such as interactive, status symbols, etc; Psychological such as derivable pleasure from use, emotional comfort, etc; Ideological such as environmental, patriotic, socialistic, etc; and Opinions influenced by associations such as newness, nostalgic, thrill, risk involved, safety, reliability, etc.

Module IV

Accessories- meaning, definition, need, types of accessories- functional, decorative, both functional and decorative.

Window Treatments – Types of windows, curtains, draperies, hanging curtains, pelmets and valances, accessories, blinds, shades.

References :

Time Saver Standard for Interior Design & Space Planning By Joseph De Chaira, Jullius Panero & Martin Zelnik Interior Design Illustrated By Francis D K Ching

Interior Design By John Pile Interior Design By Ahmed Kasu

Human Dimensions and Interior Spaces By Jullius Panero & Martin Zelnik

Basic Design of Anthropometry By Shirish Bapat

Living Area (Interior Space) By Shirish Bapat

DIDV14.03 Interior Design Materials and applications

Module I

Common Building Materials-

Stones-Different types used for floorings for different spaces/activities.

Ceramics – Definition, ornamentation on ceramics – earthenware, stoneware, chinaware, porcelain and terracotta

Brick masonry -Types of bonds - single & double Flemish bond, header bond, stretcher bond, rat trap

bond, ornamental bonding.

Module II

Timber: Classification and growth of trees and types of Timber

Quality & Properties of Timber, Defects in Timber

Seasoning & Preservation of Timber and other woods

Wood Products-Types, Quality & Uses of Veneers and Plywood

Types, Quality & Uses of Block Board, Particle Board, Fibre Board, Chip Board, Hard Board, etc.

Module III

Fabrics and other furnishing materials – fibers, textiles, fabric treatments, carpets, durries, tapestries, Drapery, upholstery, wall coverings, etc. –properties, uses and application in the interiors.

Module IV

Glass and glass products-

Glass – Enrichment of glass – etching, engraving, cutting, enameling, painting, use of glass in home.

classification, types of glass- wired glass, fiber glass, rock wool, laminated glass, glass concrete blocks - their properties and uses in buildings.

Paints-water paints, distempers, cement based paints, emulsion paints, anti corrosive paints etc.

Varnishes (oil and spirit) – various types – French polish, damp proofing finishes etc. and methods of application

References:

Engineering Materials Rangwala

Construction Materials and Processes By Don A Watson,

Building Construction Vol. I By W.B. Mckay, J.M. Mckay

Construction Materials and Processes By Don A Watson,

Barry R., "The construction of Buildings (Vol. I-V)"

Francis Ching, "Building Construction Illustrated"

DIDV14.04 Interior working drawing and detailing

Module I

Introduction, definition, meaning and importance of furniture in interior design. Analysis and designing furniture (forms) based on ergonomics.

Details of doors, windows, cupboards, partitions and joineries.

Staircase Types according to profile – straight flight, doglegged, quarter turn, half turn, bifurcated, spiral & helical.

Module II

Working drawing of work station, living room furniture, bedroom furniture and dining tables.

Details of fixed, sliding and sliding and folding partitions with wood, steel and aluminium frames & panels in glass, particle board, MDF, gypboard and plywood.

Module III

Kitchen planning – Functions performed in a kitchen, types of kitchen, principles of planning kitchen – orientation and location, ventilation, storage needs, work triangle, colour, light and

safety – work heights and space dimension of different work areas and storage areas, anthropometric measurements of an individual worker and its application to kitchen layout designing.

Materials and finishes – Various materials and finishes used in kitchen – floor, walls, sink, ceiling, platforms, storage and their characteristics

Module IV

Introduction to estimation- Estimation – definition, purpose, types of estimate, and procedure for Estimating the cost of work in order to implement an interior design project or to make products related to interior design like furniture, artifacts etc.

Introduction to specification- Definition, purpose, procedure for writing specification for the purpose of calling tenders, types of specification. Specification for different item related to interior design project – woodwork for furniture window frames & pelmets, partitions etc

1. Chakrabarthy, Estimation, costing and specification in Civil Engineering, 1981
2. Building Construction Illustrated By F D K Ching
3. Furniture & Cabinet Construction By William P. Spence, L. Duane Griffith
4. How To Build Modern Furniture By Mario Dal Fabro William P. Spence
5. Cabinet making, design & construction By L. Duane Griffith
6. Professional Practice (Estimation & Valuation) By Roshan Namavati
7. Architectural Detailing in Residential Interiors By Roshan Namavati
8. Dutta B N, Estimation and costing in Civil Engineering

DIDV14.05 Building services

Module I

Mechanical systems - Lifts and Escalators.

FIRE SAFETY- Mechanism of fire spread in building and prevention – Fire safety standards – Concepts in fire protection-Fire fighting installation and requirements - Heat sensitive detectors – Smoke detectors – Automatic water sprinkler system- Foam systems.

Module II

Artificial lighting - light sources, Types and uses of light, specific factors in lighting – measurements of lighting and economy in lighting

Electrical services – Electrical system, symbols used, three phase and single phase system, simple electrical layouts.

Module III

Essential services needed in a kitchen and toilets: Water supply – hot and cold, taping, water purifiers, plumbing etc.

Electricity services – electric current, exhaust fans, electrical equipment and their locations. –

Drainage services – Waste water drainage system, waste disposal.

Module IV

Acoustics-Definition, requirements of good acoustics, properties of sound - sound waves, wave length, frequency, velocity, resonance, sound levels, loudness, noise, sound reflection, echoes, reverberation, Sound absorption - sound absorbent materials, qualities of acoustic materials, guidelines for good acoustical design.

Air conditioning -Meaning, Principles, need for conditioning, air conditioning applications, Humidity control, types of air conditioning - central air conditioning, and packaged.

References :

Birdie, G. S., and Birdie, J. S., Water Supply and Sanitary Engineering,

Kinsler and Frey- Fundamentals of Acoustics

Ducan Templation- Acoustics in built environment

Electrical wiring, Estimating and Costing-L.Uppal

Refrigeration & Air conditioning-C.P.Arora

Refrigeration & Air conditioning-W.F.Stocker

DIDV 14.06(P) Design Visualization

Module 1

Introduction to Computers: Windows interface, Basic operations, left & right click significance; Explorer- creating/deleting folders, saving in folders, managing files creating icons, CPU, Memory, input-output devices, secondary storage devices, Latest trends and technologies of storage, memory, processor, printing etc. Operating System- Definition-Functions-Windows, and Linux. Compilers and assemblers. Application software. Definition and scope of IT, Computer networks, LAN, WiFi, Internet Services.

Module 2

Introduction to visual communication, 2d imaging, 2d painting and drawing, Photoshop interface ; tools and palettes; pencil; paintbrush; colour; eyedropper; selection tools; paint bucket; rubber stamp; RGB colour vs. indexed colour, .TIFFs; .GIFs; .JPEGs; saving and backing up files. Photoshop commands; tools and strategies for combining images; changing brightness, contrast, or colour balance; resolution; raster vs. vector graphics. working with floor plans and elevations, working with perspective and isometric views, materials for interior drawing, lighting effects and filters

Module 3

Introduction to 2D CADD interface, Setting up a drawing: Units, Limits, Zoom commands, Layer manager & standard, Status bar, Drafting Techniques: Drafting commands, Modify command, Formatting text and dimensions , Plotting And Printing: Plot style manager, Using

Internet for storing & exchanging, drawings, Introduction To 3-D Interface: Compatibility of units with other CAD software, Importing and linking 2D CAD drawings

Module 4

3dsMax Introduction, Basic interface and layout study, Basic and extended primitives, Basic layout setting for Architects, Modeling, Edit Poly Modeling, Extrude, Chamfer, Cut and Slices, Symmetry Mirror Modeling, Designing a table and chair, Designing a house using box, Lines and Nurbs, Importing a plan from AutoCAD/Vectorworks, Making an interior space, Doors and Windows, AEC extended, Railing and Trees, Stairs, Modifiers, Lattice, Lights, Camera, Texturing. Rendering (mental Ray), Rendering images, Rendering moving images, V-Ray Image rendering, Global Illumination and HDRI rendering, Final project

References :

Introduction to Computers, 6th By Peter Norton

Photoshop for Interior Designers: A Nonverbal Communication by Suining Ding

Interior Design Using Hand Sketching, SketchUp and Photoshop by Daniel John Stine, Steven H. McNeil

Autocad 2014 for the Interior Designer by Dean Muccio

Mastering Autodesk 3ds Max 2013 by Jeffrey Harper

Realistic Architectural Visualization with 3ds Max and mental ray By Roger Cusson, Jamie Cardoso