GUJARAT TECHNOLOGICAL UNIVERSITY

Program Name: Diploma in Architecture
Level: Diploma
Branch: Architecture
Course / Subject Code : DA02063061
Course / Subject Name : Architectural Drawing - II

w. e. f. Academic Year:	2025-26
Semester:	Second
Category of the Course:	Professional Core Courses (PC)

Prerequisite: Basic knowledge of drafting techniques, geometrical constructions and orthographic projections.

Rationale:	Architectural Drawing - II is a course which develops one's power of visualization of an object in third dimension by studying it's given plan, elevation and side elevation and thus will enable the learner to generate architectural drawings. It also develops the learner's perspective drawing skills. Further, this course also develops one's ability to compute the dimensions so as to be able to represent them in correct manner. This course enables the learner to develop necessary skills for preparing technically correct Architectural Presentation Drawings.

Course Outcome:

After Completion of the Course, Student will able to:

No	Course Outcomes
01	Draw sections and projections of solids for a given situation
02	Develop surfaces of solids for a given situation
03	Prepare perspective drawing of a given object or building
04	Prepare presentation drawings of a given object or building

Teaching and Examination Scheme:

Teaching Scheme (in Hours)			Total Credits L+T+P	Assessment Pattern and Marks				Total Marks
				Theory		Tutorial / Practical		
L	T	P	C	ESE (E)	PA / CA (M)	PA/CA (I)	ESE (V)	
3	0	2	5	70	30	20	0	120

Legends: L-Lecture; T – Tutorial/Teacher Guided Theory Practice; P -Practical; C – Credit, CA - Continuous Assessment; ESE -End Semester Examination.

Course Content:

Unit No.	Content	No. of Hours	% of Weightage
1.	**Projections of Solids** Draw projections of different types of solids like cube, prism, pyramids, cone and cylinder in vertical/horizontal position; inclined to one plane only. Different terms like apex, axis, slant edge, meaning and identification of the true length of the base side, true length of the slant edge, and true shape of triangular face of pyramids, etc.	9	20
2.	**Sections of Solids** Introduction of cutting planes, auxiliary planes, true shape, full section, half section. Procedure for drawing the projections of solid sections such as cube, prism, pyramid, cone and cylinder for the given position of the cutting plane.	9	20
3.	**Development of Surfaces** Draw the development of surface of different types of simple solids such as cube, prisms, pyramids, cylinder and cone Draw the development of surface of different types of truncated solids.	9	20
4.	**Perspective Views** Important Terms - Picture Plane, Station point, Vanishing point, Eye level, Ground level, Central visual ray, etc. Perspective drawings - One Point Perspective & Two Point Perspective Draw perspective drawings of given problems with respect to:- 1) Simple objects placed in relation with picture plane and station point like: i) Object touching the picture plane ii) Object in front of picture plane iii) Object behind picture plane 2) Simple object keeping eye level at different levels: i) Eye level above object. ii) Eye Level below than the given object.	12	26
5.	**Architectural Rendering Techniques** Prepare architectural presentation drawings with different rendering	6	14

	techniques showing various patterns, human figures, vehicles, furniture, trees etc.		
	Total	**45**	**100**

Suggested Specification Table with Marks (Theory):

Distribution of Theory Marks in %					
R Level	**U Level**	**A Level**	**N Level**	**E Level**	**C Level**
20	**20**	**60**	**0**	**0**	**0**

Where R: Remember; U: Understanding; A: Application, N: Analyze and E: Evaluate C: Create (as per Revised Bloom's Taxonomy)

References/Suggested Learning Resources:

(a) Books:

1. Engineering Drawing by N.D.Bhatt, Charotar Publishing House; Anand, 2014. ISBN : 9789380358963
2. Textbook of Engineering Drawing by P.J. Shah; S.Chand, New Delhi. 2013; ISBN : 9788121941822
3. Engineering Drawing by M.B. Shah, B.C.Rana; Pearsons. 2009; ISBN: 9788131759714
4. Engineering Drawing by BasantAgrawal, C. M. Agrawal; McGraw-Hill, 2019; ISBN : 9789353167448

(b) Open source software and website:

1. https://www.youtube.com/results?search_query=engineering+drawing
2. https://youtu.be/MT1T31GtGpg
3. https://youtu.be/WEwkepkv6mg
4. https://youtu.be/trJQIvatIpI
5. https://nptel.ac.in/courses/112/103/112103019
6. https://nptel.ac.in/courses/112/105/112105294
7. https://en.wikipedia.org/wiki/Engineering_drawing
8. https://www.slideshare.net/search/slideshow?searchfrom=header&q=engineering+drawing
9. https://www.scribd.com/presentation/374011718/Perspective-Projection
10. https://muthunathanespec.weebly.com/uploads/9/3/7/8/93787346/unit-v-2._perspective_projection.pdf

Suggested Course Practical List:

S. No.	Practical Outcomes (PrOs)	Unit No.	Approx. Hrs. required
1	Draw projections of different types of solids for vertical/horizontal position.	1	3
2	Draw projections of different types of solids inclined to one plane only.	1	3
3	Draw projections of different types of sections of solids for different positions of the cutting plane.	2	6
4	Draw the development of surface of different types of simple solids.	3	2
5	Draw the development of surface of different types of truncated solids.	3	2
6	Draw perspective drawings of given problems with respect to, 1. Object touching the picture plane. 2. Object in front of picture plane 3. Object behind picture plane.	4	5
7	Draw perspective drawings of given problems with different eye levels.	4	5
8	Prepare given presentation drawings using different rendering techniques	5	4
	Total		**30**

List of Laboratory/Learning Resources Required:

S. No.	Equipment Name with Broad Specifications	Pr.No.
1	Drawing instruments for class room teaching (Large Size).	1-7
2	Drawing Board (A1 : 23"x32" Size)	1-7
3	Other Instruments: Parallel, Set squares (45˚ and 30˚-60˚), Adjustable Set Squares, Protractor, Drawing Compass, Dividers, Drawing Pencils, Circle Master, French Curves, Stencils (8-6-4 mm, All in One), Eraser, Drawing sheets, Drawing Pins/Clips, Sheet Container and Drawing instrument box. ***(Note : Roller Scale to be used only for Sketch book practice work)***	1-7
4	Interactive board with LCD overhead projector	1-8

Suggested Project List:

Solve all problems for all sheets number 1 to 8 in A2 size cartridge sheets (with complete data and dimensions) after practicing in sketch book.

Suggested Activities for Students:

Other than the classroom and laboratory learning, following are the suggested student-related **co-curricular** activities which can be undertaken to accelerate the attainment of the various outcomes in this course: Students should perform following activities in group and prepare reports of about 5 pages for each activity. They should also collect/record physical evidences for their (student's) portfolio which may be useful for their placement interviews:

a) Take two simple objects in your vicinity and sketch its perspective.
b) Download the soft copy of plan, section and elevation of any building. Read and interpret this drawing.

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