

**GUJARAT TECHNOLOGICAL UNIVERSITY**  
**BRANCH NAME: B.Arch.**  
**SUBJECT CODE: 2X45005**  
**SUBJECT NAME: Computer Application-I**  
**3rd Year, 5<sup>th</sup> SEMESTER**

**Type of course: B.Arch.**

**Prerequisite:** all previous Design studios

**Rationale:**

Preparation of two-dimensional architectural drawings (including plans, elevations and sections) incorporating layers, line-weights, texts, dimensioning and formatting of drawings for taking prints and plots.

Basic three-dimensional modelling for architectural study

**Teaching and Examination Scheme:**

| Teaching Scheme |   |   | Credits | Examination Marks |         |                 |    | Total Marks |
|-----------------|---|---|---------|-------------------|---------|-----------------|----|-------------|
| L               | T | P |         | Theory Marks      |         | Practical Marks |    |             |
|                 |   |   | ESE (E) | PA (M)            | ESE (V) | PA (I)          |    |             |
| 2               | 1 | 0 | 3       | 00                | 00      | 40              | 60 | 100         |

**Content:**

| Sr. No. | Topics   | Teaching Hrs. | Weightage % |
|---------|--|---------------|-------------|
| 1       | <b>Architectural 2D CAD drafting:</b> use of 2d drafting software like AutoCAD | <b>18</b>     | <b>40</b>   |
| 2       | <b>3-D modelling:</b> use of 3d modeling software like SketchUp                | <b>6</b>      | <b>30</b>   |
| 3       | <b>Digital Presentation:</b> PowerPoint, Word, Excel                           | <b>6</b>      | <b>30</b>   |

**Suggested Specification table with Marks (Theory):**

| Distribution of Theory Marks |           |           |           |           |           |
|------------------------------|-----------|-----------|-----------|-----------|-----------|
| R Level                      | U Level   | A Level   | N Level   | E Level   | C Level   |
| <b>05</b>                    | <b>15</b> | <b>30</b> | <b>25</b> | <b>05</b> | <b>20</b> |

**Legends: R: Remembrance; U: Understanding; A: Application, N: Analyze and E: Evaluate C: Create and above Levels (Revised Bloom's Taxonomy)**

Note: This specification table shall be treated as a general guideline for students and teachers. The actual distribution of marks in the question paper may vary slightly from above table.

**Reference Books:**

1. The Art of Mechanical Drawing . A practical course for Drafting and design, By William F. Willard
2. Manual of Engineering Drawing Technical Product specification and documentation to British and international standards by Colin H.Simmons, Neil Phelps & Dennis E. Maguire
3. Working Drawings Handbook, by Keith Styles

**Course Outcome:**

| Sr.No  | CO Statement   | Marks % Weightage |
|--|--|-------------------|
| <b>Upon completion of this course, the students should be able to:</b> |  |                   |
| 1  | <b>Understand</b> the use of software                              | 25                |
| 2  | <b>Evaluate</b> the time management for development of the drawing | 25                |
| 3  | <b>Explain</b> the use of software                                 | 25                |
| 4  | <b>Propose</b> the presentations of work                           | 25                |

Term Work:

Prepare presentation report, panel and drawings using software.

