

**SKILL ENHANCEMENT COURSE
DIGITAL TOOLS FOR INTERIOR DESIGNING**

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

**Credit: 2 (Practical)
Total Periods: Practical 60 Periods**

Course title & Code	Credits	Credit distribution of the course			Eligibility Criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/ Practice		
Digital Tools for Interior Designing	02	0	0	02	12 th pass	NIL

Learning Objectives

- To provide an understanding about the importance of digital tools in Interior Designing.
- To help students learn the basics of two-dimensional drawing software – AutoCAD.
- To acquaint the student with basic three-dimensional software such as Sketch Up and 3ds MAX.
- To familiarize the students with the innovative Artificial Intelligence tools related to designing.

Learning Outcomes

After completion of this course, the students will be able to

- Use digital tools such as two-dimensional software - AutoCAD, three-dimensional software such as SketchUp and 3ds Max for designing the interiors.
- Take up jobs as designers with interior designers, architects and real estate firms.
- Apply for advanced space designing and three-dimensional designing software.

SYLLABUS

Course Contents:

Unit I: Introduction to Computer Aided Design Software (04 hours)

- Introduction to two-dimensional software - AutoCAD.
- Introduction to three-dimensional software such as Sketch Up and 3ds Max.
- Use of Artificial intelligence in interior designing.

Unit II: Two-dimensional Software – AUTOCAD

(15 hours)

- Using simple commands
- Measuring, adding dimensions and making tables
- Ensuring precision through polar tracking object snaps, grid snap
- Changing units and dimension styles
- Adding text to the drawing
- Adding colours and patterns
- Creating blocks for subsequent drawings
- Use of layers in designing
- Using design center
- Saving, sharing and printing of the document
- Preparation of simple 2D plans
- Preparation of elevation plans (2D)

Unit III Three-dimensional software

(36 hours)

- Introduction to **SketchUp**
- Basic commands in SketchUp. - Navigation Tools, Modelling Tools, Measurement, materials, styles and advanced drawing techniques
- Layout and Printing
- Introduction to **3ds MAX**.
- Object Creation and modelling – basic and advanced
- Applying Materials and textures
- Lighting and Camera
- Use of VRay
- Rendering

Unit IV: Use Of AI in Interior Design

(05 hours)

- Basic Tools – Spacely AI, Interior Render AI, RoomGPT 10, AI Home Design etc.
- Augmented Reality (AR) and Virtual Reality (VR)

ESSENTIAL READINGS

- Brightman, M. (2018). The SketchUp workflow for architecture: Modeling buildings, visualizing design, and creating construction documents with SketchUp Pro and LayOut (2nd ed.). John Wiley & Sons.
- Chopra, A., & Kauker, R. (2017). SketchUp for dummies (2nd ed.). John Wiley & Sons.
- Murdock, K. (2023). Autodesk 3ds Max 2024 basics guide. SDC Publications.

SUGGESTED READINGS:

- Derakhshani, D. (2019). Introducing 3ds Max 2020. Sybex.
- Mastering Auto CAD 2021 and Auto CAD LT 2021. John Wiley & Sons.