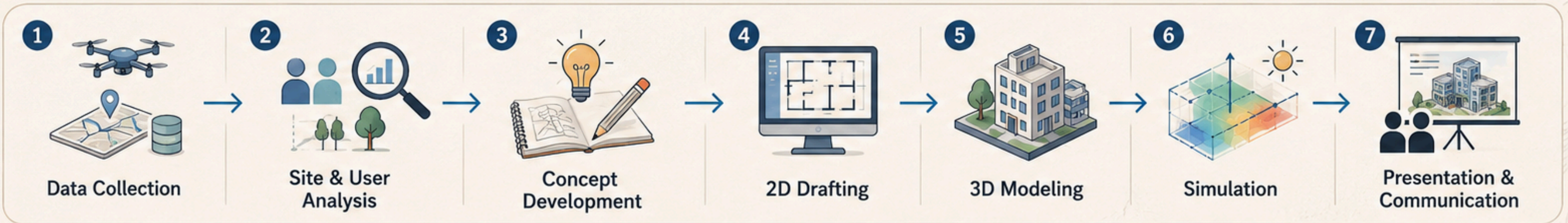
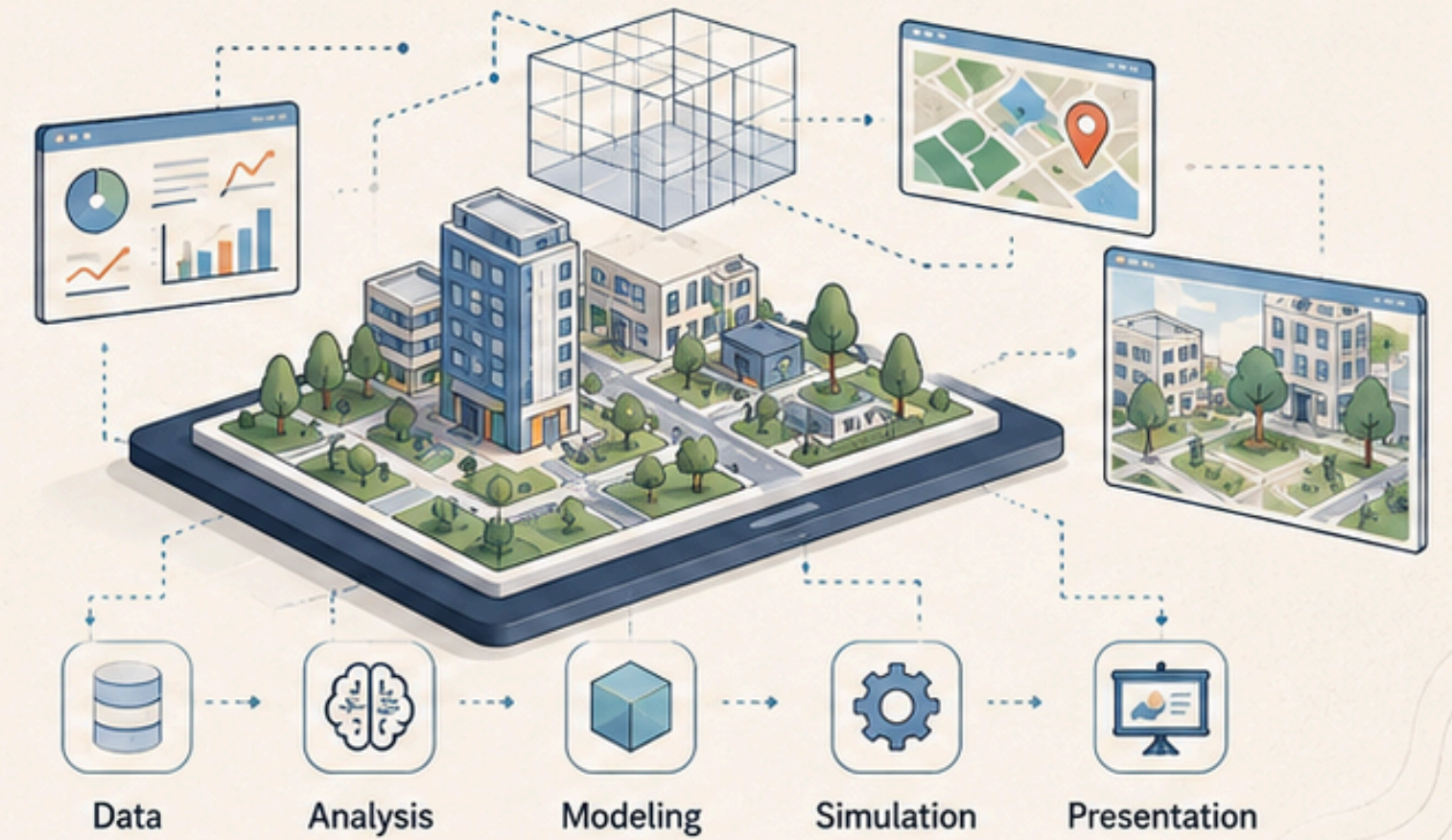


Digital Technology for Spatial Design

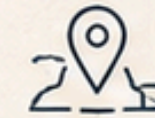
Digital technology for spatial design is the application of knowledge, tools, and digital systems throughout the spatial design process—from data collection and analysis of site conditions and user behavior to concept development, drafting, modeling, simulation, and presentation. It supports decision-making and improves the efficiency of spatial development.



Digital technology supports the design process, but it does not replace creativity, critical thinking, or the designer's judgment. Its use should consider users, site conditions, budget, and social, cultural, and environmental impacts in order to create quality, safe, practical, and sustainable spaces.



Users



Site Conditions



Budget



Socio-Cultural
Impact



Environmental
Impact



Course Objectives

- 1 Understand the principles of spatial design in a systematic way.
- 2 Apply digital technology as a tool for creating 2D and 3D design work effectively.
- 3 Develop design solutions that respond to real user needs through research and design thinking.
- 4 Analyze context and strengthen creativity for solving spatial design problems.
- 5 Present ideas systematically and connect knowledge to future commercial applications.



Course Description

This course covers the principles and theories of spatial design, layout planning, decorative elements, and appropriate proportions for effective use of space. Students explore digital technology as a tool for creating environmental design in both 2D and 3D, preparing supporting drawing documents, and presenting spatial design visualizations.



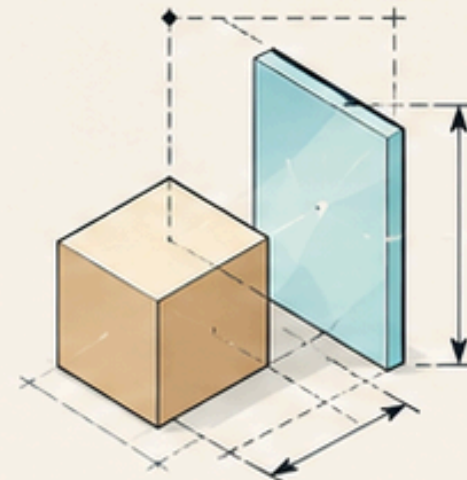
**Spatial Design
Principles**



**Layout
Planning**



**Decorative
Elements**



**Proportion and
Space Use**



**2D and 3D
Environmental
Design**



**Drawing
Documentation
and Visualization**



Key Concepts

Technology, Digital, and Digital Technology



Technology

The systematic application of knowledge, principles, methods, tools, and processes to solve problems, meet human needs, and improve work efficiency. Technology includes not only machines and devices, but also ways of thinking, systems, and practical knowledge.



Digital

The electronic representation, storage, processing, and communication of data. Digital data may appear as text, images, sound, video, 3D models, location data, or sensor data that can be processed by computers and digital devices.



Digital Technology

The use of devices, software, computer systems, and digital data to support work, analysis, communication, problem-solving, and creative production. Examples include CAD software, 3D modeling, GIS, artificial intelligence, and 3D scanning.



Key Concepts

Design, Spatial, and Spatial Design



Design

A process of thinking, analyzing, planning, and creating solutions to solve problems and respond to users' needs. Design is not only about aesthetics; it also considers function, safety, appropriateness, feasibility, and context.



Spatial

Anything related to space, location, size, shape, distance, direction, relationships between elements, and patterns of use. Spatial contexts range from rooms, shops, and exhibition spaces to buildings, landscapes, communities, cities, and natural environments.

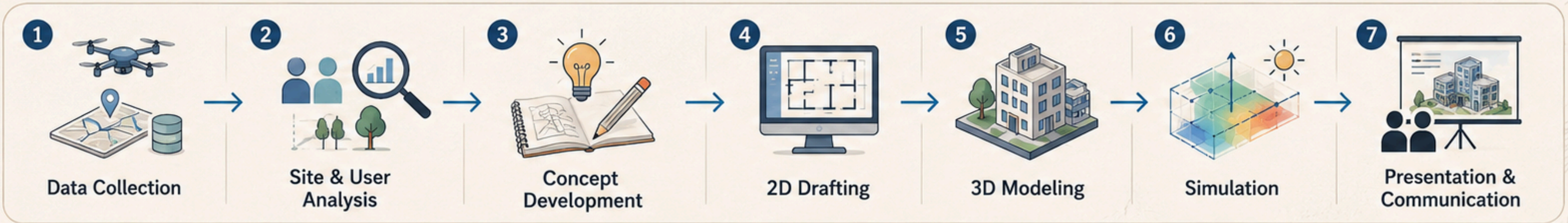
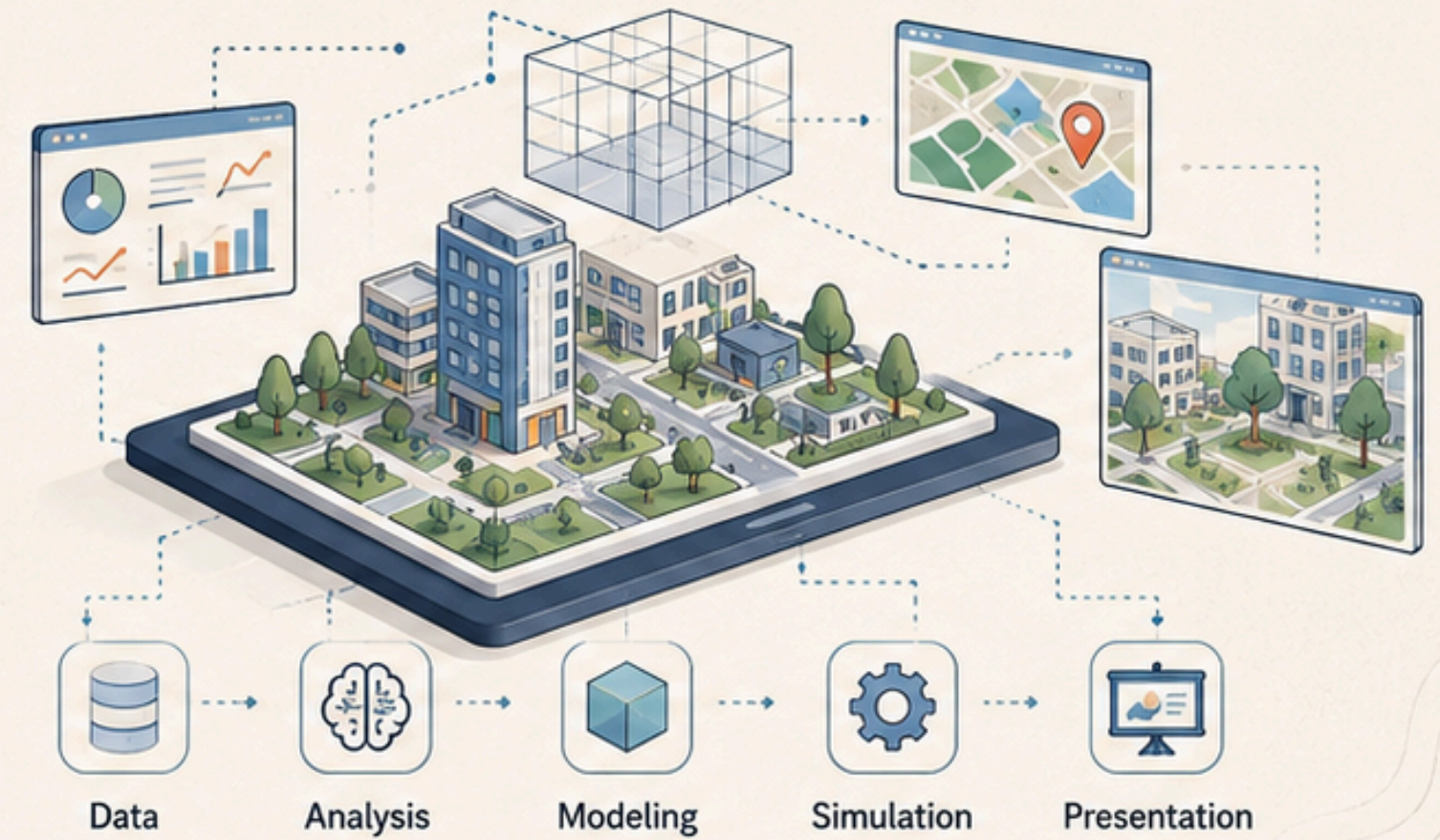


Spatial Design

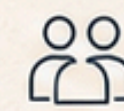
The process of analyzing, planning, and organizing spatial elements so that spaces appropriately support activities and user needs. It includes interior design, architecture, landscape architecture, exhibition design, public space design, community planning, and environmental design.

Digital Technology for Spatial Design

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