

## MODULE 1 CHEAT SHEET

Architecture as an Idea — key principles, concepts, and vocabulary at a glance.

### THE VITRUVIAN PRINCIPLES

#### FIRMITAS

Structural Integrity

A building must stand up — sound, durable, built to endure. Materials used well, loads distributed, systems that hold for decades.

#### UTILITAS

Usefulness & Function

A building must work for the people who use it. Smart layouts, intuitive flow, spaces that serve daily life.

#### VENUSTAS

Beauty & Delight

A building must move you. Proportion, harmony, light, material expression — the qualities that make a space feel alive.

### CORE ARCHITECTURAL CONCEPTS

#### Space & Meaning

Space is the primary material of architecture — how it is shaped changes how it feels.

#### Form & Proportion

The 3D shape and relationship between parts. Invisible when right, obvious when wrong.

#### Scale

How a space relates to the human body. Appropriate scale creates comfort and purpose.

#### Light & Shadow

The most powerful free tool. Natural light creates mood, movement, and depth.

#### Texture & Materiality

Every material has character — how it looks, sounds, smells, and feels under your hand.

#### Rhythm & Repetition

Repeating elements create visual order and guide the eye through a space.

#### Symmetry & Asymmetry

Balance through mirror or deliberate tension. Both are valid — intention is what matters.

#### Emotional Experience

Every space creates an emotional response. Great architecture is deliberate about what that response is.

## PRACTICAL REALITIES

### THE 15% RULE

In most residential projects, roughly 15% of the design is your freedom zone — personal expression, bold choices, creative experimentation. The other 85% is governed by codes, structure, site, and budget. Knowing where your freedom lies lets you make the most of it.

### BUILDABILITY & BUDGET

Every design decision carries a cost in materials, labor, and time. The best architects turn constraints into creative opportunities rather than ignoring them.

### RESPECT FOR CONTEXT

No building exists alone. Good architecture is in conversation with its landscape, neighbors, climate, and cultural history.

## WHO MAKES IT ALL HAPPEN

### Architect

Leads design vision and coordinates the project

### Interior Designer

Shapes interiors, finishes, and furnishings

### Civil Engineer

Site work, grading, drainage, infrastructure

### Structural Engineer

Ensures the building stands up safely

### MEP Engineer

Mechanical, electrical, and plumbing systems

### Landscape Architect

Outdoor environment and site integration

### Contractors/Builders

Turn drawings into reality on site

### Surveyor

Measures land, establishes boundaries

### Project Manager

Coordinates timelines, budgets, communication

### Town Planner

Zoning, approvals, community planning

### The Client (You)

Your vision drives the entire process

### KEY TAKEAWAY

Architecture is not just about what a building does — it is about what it says. About the people who made it, and the people who live in it. Your design philosophy is the bridge between learning these principles and applying them to your own vision.