

# Conceptual Design

Conceptual design is the process of designing a particular project at the very beginning stage. Conceptual design is a framework for establishing the underlying idea of a design and a plan for how it will be represented visually. The concept is the plan, and the execution is the action followed. Designs are often judged on their quality in concept and execution; for example, the [design of beams](#) is judged as per the load-bearing capacity of the beam.

## Conceptual Design Definition

The term conceptual design is related to the term "concept art", a piece of art (often used during the pre-production stages of movies and video games) that conveys an artist's vision of how the final product will be formed. Similarly, conceptual design occurs early in the design process, which is a key concept for the [GATE exam](#). This is usually done before the finer details, such as the precise selection of the colour and style of the artwork. Only a pen and pencil are required to carry out this process. Conceptual design has its roots in the word concept, which describes the idea or intent behind the design. This is in contrast to "implementation", which is the implementation and form that a design ultimately takes.

## Purpose of the Conceptual Design

Conceptual design is a key parameter in designing a good quality product. It is one of the phases of the development of a product where the designers and engineers work together to understand the process and resolve issues, if any. It is the earliest phase of development that involves creating the various steps of design.

Conceptual design is required to create various stages of creating the products. The development of any process depends on the successful completion of the conceptual design process. The main benefit of the conceptual design is that it can provide what can be achieved and the use of the product etc.

## Approach to Conceptual Design

As of now, we have understood what conceptual design is and its purpose, so let's understand what the approach to conceptual design is. The conceptual design approach can be broken into four parts; These steps need not be followed for the particular project. It depends on how the design happens and its entire process.

- **Definition:** The first step of the design process should consist of why the design is being carried out and the specific goal of doing that. Defining a problem correctly helps to reach the solution.
- **Research:** For the proper design, you should research the process and its implementation.

- **Verbal ideation:** Concepts related to design are usually different words; they should have been properly framed to define the correct situation of the process.
- **Visual ideation:** For a few design processes, concepts need to be formed visually; it greatly impacts the overall idea of the process.

## Conceptual Design of High-Rise Buildings

Conceptual design of high-rise buildings means establishing the shape and size of a building; it consists of the sketching and modelling process of the building. The result of this effort is an efficient and smooth process of designing. Here, a conceptual design process is given below that helps to understand the process.

