# Unit 02: Bedrooms, Bathrooms & Beyond

Content Area:	Technology
Course(s):	Architecture
Time Period:	September
Length:	8 Blocks
Status:	Published

# **Transfer Skills**

Residential design is influenced by several factors including historical trends, building codes, financial resources, environmental considerations, family needs, and availability of resources.

## **Enduring Understandings**

1. Residential design is influenced by several factors including historical trends, building codes, financial resources, environmental considerations, family needs, and availability of resources.

- 2. Individuals rooms must be planned together to ensure proper "flow" throughout the design.
- 3. Architectural floor plans are the most important drawing from which all other plans are derived from.
- 4. Additional drawings, such as elevation views, are used to further communicate a design.

## **Essential Questions**

1. What factors must be considered when designing a residential house?

- 2. How are the rooms in a typical residential home related to each other?
- 3. How does the environment and geographic location influence house design?
- 4. How does furniture impact the design of individual rooms?

- 5. What is necessary to fully describe a design?
- 6. How can plumping features be arranged so they're more efficient?

#### Content

Vocabulary:

living area, sleeping area, service area, traffic area, clearances, traffic flow, building codes, fire codes, openconcept, 1/2 bath, 3/4 bath, full bath, trap, vent, egress, cross-ventilation, vanity, pedestal sink

#### Skills

- 1. Describe why the furniture layout in a room dictates its design.
- 2. Create a furniture and window layout for several sizes of bedrooms.
- 3. Create a plumbing fixture layout for several sizes of bathrooms.
- 4. Create a furniture and window layout for a living room.
- 5. Design and create a master bedroom suite with attached bathroom.

#### Resources

11x17 Paper / Drawing Boards / T Square / Pencil / Erasers / Rendering Markers

# Standards

# NJ: Grade 9 - 12 9.3 CTE: B. Architecture & Construction Career Cluster

## **Academic Foundations:**

9.3.12.AC-DES.5 Identify the diversity of needs, values and social patterns in project design, including accessibility standards.

## **Communication Skills:**

9.3.12.AC-DES.6 Apply the techniques and skills of modern drafting, design, engineering and construction to projects.

9.3.12.AC-DES.7 Employ appropriate representational media to communicate concepts and project design.

9.3.12.AC-DES.1 Justify design solutions through the use of research documentation and analysis of data.

# **Problem-Solving and Critical Thinking:**

9.3.12.AC-DES.8 Apply standards, applications and restrictions pertaining to the selection and use of construction materials, components and assemblies in the project design.

9.3.12.AC.4 Evaluate the nature and scope of the Architecture & Construction Career Cluster and the role of architecture and construction in society and the economy.

9.3.12.AC.6 Read, interpret and use technical drawings, documents and specifications to plan a project.

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