Architecture Week 2024

Building Certificate Program

THE HOUSE THAT SHEBUILT

Let's Get Building!

The House That She Built movement was inspired by a real construction project. Driven by the fact that less than 3% of the onsite workforce are women, the goal was to highlight and utilize skilled tradeswomen and women-owned companies for all stages of the build. It also inspired a book that showcases different skills and careers responsible for building a home. Through the book, accompanying programs, and elevating the stories of these amazing women, we can showcase the incredible work that a group of people with diverse skills is able to achieve together, including architects!

Steps:

- Investigate the World of Architecture
- Design Something Great
- Build a Scale Model
- Reflect & Share

Purpose:

Kids that earn this certificate will know more about the field of architecture, feel confident in utilizing their unique skillset to contribute to a team, and build something great.



Step One: Investigate the World of Architecture

Before you decide whether becoming an architect is for you, spend some time investigating what it might be like. When thinking about what kind of job you want in the future, it's important to consider the things you enjoy and are skilled at doing. Combining the two is a great way to make sure you're in a job that makes you happy.

> Complete this step by choosing one of the two options below. Feeling ambitious? Try both!



Explore different types of careers in the field of architecture. Below are some examples of job titles you can research. Each one of these jobs require specific skills and each is just as important as another to ensure that any building job goes smoothly. Make a list of skills you have and things you enjoy doing. For example, are you good at solving problems? Are you artistic? Do you enjoy working with your hands? Choose 2-3 of the careers listed below and see if anything might be a good fit for you in the future.

Before you decide where to start, check out <u>this video</u> by KiwiCo to hear from Katherine Williams, a veteran architect and founder of the Black Women in Architecture Network. Listen to how she took her passion and made it into her career - you can do that too!

Building ArchitectLighting Architect

• Drafter

Landscape Architect

Interior Designer

Surveyor

- Urban
 - Urban Planner

Restoration Architect

Some links you may want to check out: Bureau of Labor Statistics, Time for Kids, Virginia Career View





Reach out to an architecture firm or an AIA chapter in your community. Talking to the people in your community that do some of the jobs listed above is a great way to learn about the field of architecture! Find a company that does work you find interesting and set up time to interview at least one person who works there. Before your interview, create a list of questions you want to ask! Some questions might be: What is a typical day like in your job? What do you like most/least about this career? What did you study in school?



Step Two: Design Something Great

One of the best parts about being in architecture is getting to build something from the ground up. Whether it's creating homes, playgrounds, or airports, the journey begins with a simple yet powerful combination: an idea and a meticulously crafted design.

To complete this step, put on your architect hat and follow the guide below to design something. Choose one of the following options and then answer the questions below before getting started.



Now answer the following questions:

What type of structure are you building?
Why do you want to build it?
Why is it needed or wanted?
Who is going to use the space?
How are they going to use the space?
What are the top 3 things that are important to include when building the space?



Step Two: Design Something Great (Continued) Let's start designing! Architects and designers have different methods of creating a plan for a building. Some like to draw on paper and others prefer to use a computer. Use this graph paper to get started! Or design using virtual graph paper here!



Step Three: Build a Scale Model

What is a scale model? A scale model is like a prototype. It is a small, physical version of your design so that you can see what it might look like when brought to life. This step is a great way to understand what parts of your design might need to be adjusted before building the real thing. Many architecture firms also use this as a tool to showcase what they are creating to the communities that will use the structure.

- Collect materials that would be useful to create a model of your building. (Think Lego bricks, paper, marshmallows, graham crackers... materials can be anything!) Review your design and think about what types of materials might best represent your vision. Don't forget something to help hold everything together, such as tape or glue.
- Create a base for your model to sit on. This could be cardboard, paper, or something similar that will help make sure it is sturdy. Fun fact: In a real building, this would be called the footer or the foundation.
- Start building!



Looking for a teamwork challenge?

Remember that working in architecture means you are part of a team. Whether you are the designer or the engineer, you must work with other skilled tradespeople to make the vision come to life. Consider the following two options to stretch your teamwork muscles.



Option One:

Partner up and build a friend's design. See if you can interpret their design plans and bring their vision to life on your own! This is a great way to learn why it is important to make sure you create a clear plan for your structure on big projects.



Option Two:

Divide into jobs based on some of the different trades listed in Step 1. Each job will be responsible for building a certain portion of the group's designs. For example, someone can be in charge of the walls, while someone else builds all the roofs, and another person begins work on creating some beautiful landscaping.



Step Four: Reflect and Share

REFLECT: (Answer whichever question(s) inspire you)! Why do you think The House That She Built Project and Movement are important? Which step or activity did you enjoy the most? What did you find the most challenging? What did you think about the jobs discussed in this certificate program before you started? Did your mind change after?





The American Institute of Architects

Building Certificate Program

CHECKLIST



Step One: Investigate the World of Architecture



Step Two: Design Something Great



Step Three: Build a Scale Model



Step Four: Reflect and Share



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