



Virtual Learning

Career Explorations: Architectural Engineer

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Civil Engineering and Architecture
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Lesson: **May 22, 2020**

Objective/Learning Target:

Students will explore Architectural Engineering as a career path.



What do they do?

“**Architectural engineers** deal with the technological aspects and use a multi-disciplinary approach to planning, design, construction and operation of buildings, such as analysis and integrated design of environmental systems (energy conservation, HVAC, plumbing, lighting, fire protection, acoustics, vertical and horizontal transportation), structural systems, behavior and properties of building components and materials, and construction management.”

Wikipedia

What skills do they need?

Architectural Engineers require strong technical (science, physics, materials knowledge, etc.) and mathematical skills, as well as communication, analytical, critical-thinking, organizational, visualization, and artistic skills. They also must be proficient with specialized tools and technology.



<https://onlinemasters.ohio.edu/blog/essential-skills-for-a-career-in-civil-engineering/>



Watch the video:

How to Become an Architectural Engineer

After watching the video, answer the following questions in your engineer's notebook or on a piece of notebook paper. You will need to utilize additional resources to fully answer the questions (remember to cite your sources).



Questions

1. What are the main job responsibilities of an architectural engineer?
2. What is the average salary of an architectural engineer (use the most current information you can find)?
3. What is the job outlook for an architectural engineer in Kansas City? Is the number of architectural engineers needed going to increase or decrease in the future?
4. What types of activities could an architectural engineer expect to do on a daily basis?
5. What does a person need to do to become an architectural engineer? How long might it take?



Additional Resources

<https://www.youtube.com/watch?v=PkHixLc0Kn0>

<https://www.youtube.com/watch?v=bFljMHTQ1QY>

<https://www.youtube.com/watch?v=HAx7E3Bu7gA>