

AIRPORT DESIGN CHALLENGE

Recommended Program Schedule & Checklist – Grades K-6

Welcome to the Airport Design Challenge! We can't wait to see what you build! Although the challenge runs in an annual cycle, we recommend that you plan to complete your initial project **in 10 weeks!** That has been most successful for past participants. From there, you can make improvements until you're ready to submit your final video!

Week 1

Orientation

Alexander Graham Bell taught that, “before anything else, preparation is the key to success.” During orientation, there are a lot of tasks that you must complete in order to be ready for the challenge to start. As you get started on the Airport Design Challenge, we want to make sure you have all the information you need to help you succeed. In this section, you will learn how to navigate the ADC modules, see how your project will be scored, hear from previous challenge winners, and more. Get ready, you are about to begin!



Review the [Orientation webpage!](#)

Watch the [Minecraft Tutorial Videos!](#)

Orientation Quiz (Found in the [Orientation Workbook](#))

Choose Your Airport

What kind of airport will you choose? Learn about the different types of airports, research ones near you or ones of interest, and choose your project!

Review the [Choose Your Airport webpage!](#)

Choose Your Airport Quiz (found in the [Choose Your Airport Workbook](#))

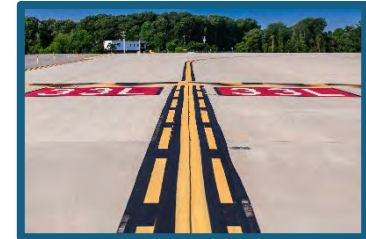
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Weeks 2 & 3

Module 1 – Paved Surfaces

To get started, make sure you understand how your runways and other paved surfaces are laid out, then begin building them in Minecraft. This is usually the hardest part of the entire project so take your time and make sure it is done just right.

Getting all of your paved surfaces built can take a lot of time! Remember, this requirement is only to get the pavement in. You will add paint, lights, and details in Module 3.



Review the [Paved Surfaces webpage!](#)

Airport Layout Plan – Part 1

Module 1 Quiz (found in the [Paved Surfaces Workbook](#))

Week 4

Module 2 – Safety & Security Areas

Module 2 will give you a bit of a break after all the long, hard work you did on paved surfaces. In this module you will build a perimeter fence around your airport, including gates to allow vehicles and people to pass through. In addition to fences, you will want to make sure there are no obstructions at the end of your runways.

Safety is at the center of everything that the FAA does! Our mission is to maintain the safest and most efficient airspace in the world! You can be part of the safety mission by paying close attention to the features of your airport in this module!



Review the [Safety & Security Areas webpage!](#)

Airport Layout Plan – Part 2

Module 2 Quiz (found in the [Safety & Security Areas Workbook](#))

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Week 5

Module 3 – Lighting, Markings & Signs

Adding airport lighting, markings, and signs requires some real attention to detail, but it is that detail that really makes your airport start to look like the real thing. Take your time this week and make sure you add as much detail as possible!



Review the [Lighting, Markings & Signs webpage!](#)

Airport Layout Plan – Part 3

Module 3 Quiz (found in the [Lighting, Marking & Signs Workbook](#))

Weeks 6 & 7

Module 4 – Airport Buildings

In Module 4, you should begin putting in all of the buildings on your airport. Some airports have a lot of buildings, and some have much less, but each building is unique so consider how you can make each one look as close to the real thing as possible. Airport buildings, fuel farms, and other details can really take some time to complete. Take this week to keep working on those details.



Hint: If you really want to know what your airport looks like, consider asking for an airport tour!

Review the [Airport Buildings webpage!](#)

Airport Layout Plan – Part 4

Module 4 Quiz (found in the [Airport Buildings Workbook](#))

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Week 8

Module 5 – Innovations & Future Growth

Like most things, airports have grown through new technology, ideas, and needs. In Module 5, you get to stretch your creativity and determine what your airport could look like in the future. Perhaps it will have a new tower, a bigger terminal, or longer runways. Enjoy your own innovation!



Review the [Innovations & Future Growth webpage!](#)

Airport Layout Plan – Part 5

Module 5 Quiz (found in the [Innovations & Future Growth Workbook](#))

Weeks 9 & 10

Module 6 – Final Airport Tour

This is it! Your chance to show off all your work since Day 1! You will take our judges on a brief, virtual tour of your Minecraft airport.

If you want to take more time to put some finishing touches on your project, now is the time! But don't forget to submit before the deadline!

Review the [Final Airport Tour webpage!](#)

Review the [Rubric](#) one more time!

Record your Final Airport Tour Video!

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Submitting Your Final Project

Submit your final project video and all required forms to avsed.challenge@faa.gov! We can't wait to see what you've created!

Submit your final project video to avsed.challenge@faa.gov



Congratulations! You have completed the Airport Design Challenge!

