



2021 Virtual Work Experience Programme

Jacobs

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Reinventing tomorrow.



Background:

Each year, Jacobs hosts work experience students throughout our offices in the UK to encourage them to pursue a career in the STEM (Science, Technology, Engineering and Maths) fields. This presents a great opportunity for students to learn from the wide range of projects that Jacobs is involved in, along with our clients, that are shaping the world that the students live in.

[Jacobs](#) is one of the world's largest companies providing technical solutions to make the world smarter, more connected and more sustainable. At Jacobs we do everything from helping to create a cleaner, healthier River Thames, to making our transport systems more inclusive, all the way to working with NASA to get the first woman to the moon by 2024. If you're interested in finding out more about Jacobs, watch this video to find out what [makes us different](#), how we [work smarter](#) and how we're making a difference to [mental health](#) across the world.

Typically, work experience involves the students coming into one of our offices and spending time with Jacobs employees from different fields or backgrounds to learn about their careers, current projects and their pathway into their career. While the vaccination rollout is continuing to progress rapidly across the UK, it is unlikely that we will be back in our offices by summer of 2021, and, therefore unable to offer office-based work placements this year.

Jacobs Virtual Work Experience Initiative:

In response to the current situation Jacobs has developed a virtual work experience programme. The programme will centre around the design of a Coronavirus vaccine research facility. We introduce students into the wide range of people within the STEM fields that come together to make this project a reality from architects and engineers through to project managers and safety specialists. In addition to focussing on the technical skills, we are also aiming to introduce students to some of the key skills they will need in the workplace in the 21st century such as creativity, problem solving and resilience.

The first version of the programme has been developed for students aged 15 and over. In 2020 over 250 students from across the UK completed the programme. Of these, 97% would recommend the programme to a friend and 99% have said that it has made them more interested, or as interested in pursuing STEM as a career option.

Format:

For 2021 we are offering two streams of the programme:

1) Virtual Work Experience Programme (5 Week Online Programme)

For students who are passionate about STEM, we recommend they undertake the complete experience. This will involve them learning about 9 different disciplines that will come together to design and build a Coronavirus vaccine research centre.

The programme is comprised of 10 sessions which will typically be delivered in the following format:

- A video introduction (about 1 hour) from an expert in each discipline to talk about how their field relates to the overall project, as well as a general introduction to the discipline
- A series of activities that the students will go away and complete (researching the best site, developing alternative building layouts etc.)
- A live Q&A session with a Jacobs employee from that discipline to answer any questions about their career, how they got where they are, what they're working on

Students who select this option will be expected to watch all of the content and complete the activities associated with each one. There are two submission requirements at the end of the programme.

The programme has been created to give students about 30 hours of structured work experience. Students will also receive a certificate upon completion of the programme.

The programme is also aligned to Gatsby Benchmarks 5 and 6, to introduce students to the workplace.

Note: We will limit the number of students on each programme to ensure they are able to interact with the Jacobs team.

2) Live Q&A sessions only (for those students who are curious to learn more about STEM).

If you're interested in STEM, but not sure if you want to dive all the way in, we will be streaming the Live Q&A sessions for each of the topics. This will mean you will be able to join the broadcast and get to meet Jacobs experts who work across a wide range of disciplines & ask them questions.

Note: While some of the sections of the Live Q&A and some questions may relate to the activities students have been asked to do as a part of the Virtual Work Experience, these sessions are usually much more general.

There will be no limit on the number of students who can join these sessions.

The programme will run over 5 weeks as shown in the table on the following page. As we're trying to reach students across the UK, all live interactions will be in the afternoon at 4PM to avoid as many clashes as possible with different school events. We also record each of the live Q&A sessions in case of an emergency.

Requirements:

The programme will be delivered via Microsoft Teams, we also use Word and PowerPoint.

If you are not already using Microsoft Teams, you can download it on your laptop, tablet or mobile. We will provide instructions closer to the start date for your programme.

Start dates:

We will start a new programme every second Monday from the end of the April half term break. This means programmes will start on the 19th of April, 3rd of May, 17th of May, 31st of May and 14th of June.

How do I sign up?

Please complete the registration form [HERE](#).

We will endeavour to get back to students as quickly as possible but there may be a delay of up to a week while we review applications.

More information:

For more information please reach out to Bobby, Jason and the team at JacobsVWX@Jacobs.com

| Tuesday April 20th | Tuesday April 27th | Tuesday May 4th | Tuesday May 11th | Tuesday May 18th |
|---|---|--|--|--|
| <p>From 4PM Monday (19th):</p> <p>Live Introduction</p> <p>From 4:30PM Monday: Project Management Lecture & Activities Uploaded</p> <p>4PM Tuesday: Live Project Management Q&A Session</p> <p>4:30PM: Individual re-cap / write up of the day's tasks</p> | <p>8AM: Transport Planning Lecture & Activities Uploaded</p> <p>4PM: Live Transport Planning Q&A Session</p> <p>4:30PM: Individual re-cap / write up of the day's tasks</p> | <p>8AM: Architecture Lecture & Activities Uploaded</p> <p>4PM: Live Architecture Q&A Session</p> <p>4:30PM: Individual re-cap / write up of the day's tasks</p> | <p>8AM: Structural Engineering Lecture & Activities Uploaded</p> <p>4PM: Live Structural Engineering Q&A Session</p> <p>4:30PM: Individual re-cap / write up of the day's tasks</p> | <p>8AM: Electrical Engineering Lecture & Activities Uploaded</p> <p>4PM: Live Electrical Engineering Q&A Session</p> <p>4:30PM: Individual re-cap / write up of the day's tasks</p> |
| Thursday April 22nd | Thursday April 29th | Thursday May 6th | Thursday May 13th | Thursday May 20th |
| <p>8AM: Health & Safety Lecture & Activities Uploaded</p> <p>4PM: Live Health & Safety Q&A Session</p> <p>4:30PM: Individual re-cap / write up of the day's tasks</p> | <p>8AM: Urban Planning Lecture & Activities Uploaded</p> <p>4PM: Live Cities & Urban Planning Q&A Session</p> <p>4:30PM: Individual re-cap / write up of the day's tasks</p> | <p>8AM: Interior Design Lecture & Activities Uploaded</p> <p>4PM: Live Interior Design Session</p> <p>4:30PM: Individual re-cap / write up of the day's tasks</p> | <p>8AM: Mechanical Engineering Lecture & Activities Uploaded</p> <p>4PM: Live Mechanical Engineering Q&A Session</p> <p>4:30PM: Individual re-cap / write up of the day's tasks</p> | <p>4PM: Live careers chat (with Q&A) with a special panel</p> <p>Followed by</p> <p>End of Week Recap and Wrap up Session (including feedback survey)</p> <p>4PM: Solutions uploaded</p> |

Figure 1 - Example Virtual Work Experience Programme – 5 Week Format (Subject to Change)

Selected Feedback from students:

"...I've learnt a lot about engineering and architecture, which has further inspired me to pursue engineering as a career choice; hopefully, I will be able to work with Jacobs again in the future."

"At first, I was unsure due to my belief that the areas required for the work experience (architecture, engineering, etc.) weren't my cup of tea. However, in hindsight, I am glad I decided to take part as it enabled me to have an insight into some interesting potential career routes."

"I just wanted to say that this has been a really positive experience so far and it has already shown me an insight into a range of roles that I previously did not know much about. I would highly recommend this programme to others."

Appendix A. Frequently Asked Questions:

- 1) Is there a cost to the programme?

No. There are no costs for students undertaking the programme. Jacobs is hosting this virtual work experience programme to introduce students into the world of STEM and all of the potential careers that are available to them.

- 2) How do you handle safeguarding for the children?

Jacobs have developed a safeguarding policy for the virtual work experience programme which can be requested if you send us an email to JacobsVWX@Jacobs.com.

For the programme, we don't have video interactions with the students. We use the live broadcast feature within Microsoft Teams which allows us to share our video and audio but prevents the students from accidentally turning on theirs. Students ask questions using the live Q&A chat feature.

- 3) Are there any limits on places for certain schools?

Yes. For the complete programme we are likely to have to limit the number of students who can attend from any one specific school. We want to be able to reach students across the UK who are interested in STEM and will aim to be as inclusive as possible.

There will be no limits to the number of students who can join the live Q&A sessions.

- 4) Is the programme full time? When do the students need to be online?

Below hopefully explains in more detail what the programme would look like on a day to day basis for the students.

- Early on Monday morning and Wednesday morning (around 8AM), we will upload the pre-recorded lecture videos and activities for each topic (i.e. Monday will be project management, Wednesday health and safety, etc). The students are able to watch these videos and do the activities whenever it suits them around their workload.
- On Tuesday and Thursday afternoon at 4PM we will do the live Q&A sessions where the students can join a teams broadcast and interact with a Jacobs expert from the topic they're currently studying (architecture, project management etc).
These are also recorded if a student can't make that time slot.

- 5) My students are in Year 8 or 9, can they still join?

We would advise against students younger than Year 10 (15 years old) joining the programme. We have tailored the content and activities for students in Year 10 and upwards. Students below this year may have trouble keeping up and we don't want them to have a bad experience.

- 6) I have a student who did the programme last year, is this year's programme different?

This programme has been updated from the programme last year, however, the key takeaways and insights from the programme are very similar. If a student did the programme last year we wouldn't recommend doing this programme again.

There are other opportunities available through STEM Learning UK (<https://neonfutures.org.uk/>) or Speakers for Schools (<http://speakersforschools.org/>) that we would suggest.