

Guidance for your Arkwright Engineering Scholarship Interview



ARKWRIGHT
ENGINEERING SCHOLARSHIPS
part of The Smallpeice Trust

The Arkwright interview is likely to be your first experience of a formal interview and is an early opportunity for personal development. We would like it to be an experience you will remember and find beneficial, by gaining interviewing skills and confidence.

The interview is not a mere formality. The decision to offer you a Scholarship is determined by your interview performance.

The Interview Day

The day will be hosted at a university renowned for its engineering courses and research. It is a busy day, so rest well the day before and arrive early if possible. During the day you will participate in a team challenge activity in which you will work with other candidates who you do not know to solve an engineering problem. The aim is to provide an educational experience incorporating teamwork and communication skills. The team challenge activity does not form part of our assessment process and will not influence the outcome of your interview.



During the team challenge each candidate will be called out in turn to attend their interview. Once the interview is over you will return to your team to continue the activity.

You and your guest/s may have the opportunity during the day to join a guided tour of some of the university which may include engineering, technology or design. We suggest that you use this as an opportunity to ask questions about what it's like to study engineering at university.

Preparing for your Interview

Each interview lasts 20 minutes and we strongly advise that you practise your interview skills with family or friends before the interview day.

The interview begins as soon as you enter the room and doesn't finish until the door has shut behind you on your way out – so make sure you make the right impression throughout your time in the interview room.

You must prepare the evidence of your project for concise presentation at the interview and be ready to explain how your project has been developed and the technical challenges you faced.



The Interviewers

You will be interviewed by a panel of 2 people who will ask you questions about:

1. the technical project that you have brought along to show
2. your GCSE / Scottish National 5 work
3. your wider interests and activities in engineering
4. your educational and career aspirations
5. your other social activities, particularly those that demonstrate leadership

Our interviewers are highly experienced and will not try to catch you out with trick questions; if you don't hear or don't understand a question that the interviewers ask, say so straight away or ask them to rephrase it. If you don't know the answer to a question, we advise you to say so and don't try to bluff it.

Dress

Your personal appearance will create the Interviewers' first impression of you. Carefully select your clothes and make sure they are clean and ironed in advance. Your school uniform, a suit or other smart dress should be worn (*NO JEANS, T SHIRTS or TRAINERS*). We recommend wearing trousers as there may be some low-level work during the team activity.



Demeanour

We know the interview is stressful but try to smile and look confident. Sit comfortably, upright in your chair, don't slouch. Try to maintain eye contact with the interviewers when you are speaking to them. Don't panic - if you think things are going badly, take a deep breath and pause for a moment before answering the next question.

You will be given the opportunity to ask questions and to add any extra information at the end of the interview; use this time to mention anything that you think is important to your application but which the interviewers have not asked about, and to ask questions. Never leave the interview room wishing that you had raised something you wanted to talk about.

What You Must Bring to Your Interview

It is extremely important that you attend your interview with evidence of a project. Failing to attend your interview with project evidence will impact on your interview performance. You may bring evidence of up to two projects, one of which must be the project you mentioned in our on-line application.

The project evidence should consist of two things:

1. A hard-copy presentation

You will need to concisely describe and show how you worked through the whole project, e.g. researching, analysing, technical specification, drawing of ideas and development of solution (including any supporting photos.) This evidence will enable the interviewers to see your ability to analyse in depth, problem solve and communicate your ideas. Remember your interview is only 20 minutes and you might want to consider using sticky labels on larger portfolios so that you can easily identify your best work for discussion

2. The product

The interviewers will need to see evidence of your practical ability. This will either be the product, components or software code that you have put together. Coding projects are the **only** scenario in which you can use a laptop/iPod/smart phone etc to demonstrate evidence of your project.

Photographic evidence of your product is acceptable if the product is too big or too fragile to transport, but it is always best to bring the actual product wherever possible.

The project you wish to discuss at interview may be any of the following:

- A project you have done away from school
- An extra-curricular school project (e.g. something completed in a lunch-time Engineering Club)
- A GCSE / Scottish National 5 / BTEC curriculum project

The interviewers are looking for a clear demonstration that you have:

- A strong practical, problem-solving ability in engineering
- Your spoken and written evidence effectively demonstrates the depth of your knowledge and understanding of your project.

Given the short time you have available in the interview, it is wise to practice your project explanation beforehand and time yourself.

If you have no specific project to discuss, be prepared to talk more about the subjects outlined in items 2 and 3 below.

At the interview you should be prepared to discuss:

1. The project evidence that you have brought along, including:
 - a. Design and engineering principles affecting your project work
 - b. The construction materials chosen and your reasons
 - c. Construction methods including knowledge of the tools used in construction
 - d. What you have learnt during the work undertaken and how it could be improved upon if you were to start again or develop the project further
2. Your desired education and career route which should include:
 - a. A2 Level or Higher / Advanced Higher subjects that you plan to take
 - b. Engineering courses at university or higher apprenticeships which you have researched and are considering
 - c. Any work experience you have had or plan to undertake, relating to your career ambition
 - d. Sponsorship you have had or hope to apply for
 - e. Companies you aspire to work at and/or engineering disciplines you aspire to work in.
3. Discuss your interest in engineering. This may include:
 - a. An area of engineering or someone within engineering that inspires you
 - b. Your technical interests (e.g. civil, renewable energy, bi-mechanical, systems control, computer programming, construction etc)
 - c. Your wider hobbies

Our Interviewers are looking for people who:

- Are polite, enthusiastic and communicate well
- Are knowledgeable about what they have done to date in engineering both related to their project and more generally
- Have good general knowledge of engineering or deep knowledge of a specific area
- Are creative and can demonstrate problem solving in their projects and extra-curricular activities
- Are confident and show the potential to achieve significant career progression and achieve positions of leadership
- Have a genuine interest and commitment to university study, or a higher apprenticeship and a career in engineering

Special Notes:

- You begin the interview with a 'clean sheet'. Your aptitude exam performance is not considered as part of the interview and the interviewers will not have seen your answers
- No previous scores are taken into consideration
- Computers will not be made available for you; if you are demonstrating code as part of your project, you will need to provide your own laptop/iPad/tablet/smart phone or similar device to show your software running; if your equipment fails, no re-interview is possible
- You will not be allowed to leave the interview to gather charging cables etc. so make sure you bring these with you, or any electronics have enough battery life
- Where schools have more than one candidate being interviewed the students may be allocated to different interview venues and different arrival times