

Guidance for your Arkwright Engineering Scholarship Interview



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 or not is determined by your interview performance.

The Interview Day

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



During the team challenge activity, 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 parent(s)/guardian(s) may have the opportunity during the day to join a guided tour of some of the faculties at 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

The interview will last 20 minutes - this is not long. We strongly advise that you practise your interview skills before the interview day. Ask friends or family to ask you questions that you are likely to be asked on the day – try giving clear, concise answers. Practice walking into a room, confidently shaking hands and sitting comfortably on an office chair.

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 can make the right impression throughout your time in the interview room. There are numerous interview skills videos on YouTube that can help you hone your skills.

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



The Interviewers

You will be interviewed by a panel of 2 people comprising representatives from a school, industry, university, armed service or similar organisation. They will discuss and ask you questions about:

1. the technical project(s) that you have brought along to show

2. your GCSE / Scottish National 5 work
3. your wider interests and activities in engineering / technical design
4. your educational and career aspirations
5. your other social activities, particularly those that demonstrate leadership

Our interviewers will **not** try to catch you out with trick questions. They will put you at ease when you first enter the interview room, so expect some 'ice breaker' questions about how you are, where you travelled from etc. If you don't hear or don't understand a question that the interviewers ask, say so straight away and ask them to rephrase it. Our interviewers are highly experienced, if you don't know the answer to a question we advise you to say so and don't try to bluff it. Feel free to ask the interviewers questions if you are interested in something they say.

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.



Demeanor

We know the interview is stressful but try to smile and look confident. Sit comfortably, fairly 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. Most interviews can be 'rescued' part way through, so try to relax and focus on the next question not on any errors you may have made. You will be given the opportunity to ask questions and to add any extra information near 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. Always ask if you can make one final point or ask one more question if you have anything left unsaid.

What You Must Bring To Your Interview

It is extremely important that you attend your interview with **evidence** of a project, hobby or pastime you have undertaken which demonstrates your flair and knowledge in the field of engineering or technical design. 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 evidence should consist of two things:

1. **A hard-copy presentation folder or portfolio**
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 practical / manufactured product**
The interviewers will need to see evidence of your practical ability. This will either be the product or components of it that you have manufactured. 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 such as at home or Scouts/Guides
- 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 or technical aspects of design.
- 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, practise your project explanation beforehand and time yourself.

If you have a project that is a piece of software that you have written, then you may bring along a computing device e.g. a laptop, ipad, tablet or smart phone to demonstrate your software in action and to display segments of code. You may not use this, or another computing device to display any other evidence.

If the project you wish to discuss is not a piece of software then you are not permitted to use any phone or computing device in the interview to present your work.

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, career route and career ambitions which should include:
 - a. AS/A2 Level or Higher/Advanced Higher subjects that you plan to take
 - b. Engineering / design 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. With enthusiasm and passion, discuss your interest in engineering, technical design, and more generally. This may be:
 - a. An area of engineering/design or someone within engineering/design that inspires you
 - b. Your technical interests (e.g. renewable energy, prosthetics, Formula 1, computer programming, construction etc)
 - c. Your wider hobbies (e.g. sport, playing a musical instrument, charity work, Scouts/Guides/Cadets, sketching buildings, restoring an old car etc).

Our Interviewers are looking for people who:

- Are presentable, polite, enthusiastic and can communicate well
- Are knowledgeable about what they have done to date in engineering and/or technical design both related to their project(s) and more generally
- Have wide knowledge of engineering or technical design; 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 and desire 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 or technical design.

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 Aptitude Exam answers. They will refer to your application form, but cannot see how it was scored by the Arkwright Selection Panel.
- Computers will not be available for you to show electronic evidence and you should not bring your own laptop/ipad/tablet/smart phone etc. You should bring legible hard-copy documents to demonstrate your project(s). The one exception to this is if the project you wish to discuss is a piece of software, in which case you may bring a laptop/ipad/tablet/smart phone or similar device to show your software running and segments of code **only**. The responsibility for the correct working of this computing equipment is entirely yours; neither Arkwright nor our interviewers can be held responsible for equipment failure. **No electronic socket will be available to charge your equipment at any venue.** We strongly suggest, if you are bringing a laptop or similar equipment to display software, that you have suitable hard-copy evidence as a back-up in case your equipment fails. No re-interview will be possible if your computing equipment fails.
- All Interviewees receive an email detailing the interview venue, maps, arrival time and instructions with the areas of the programme highlighted that parent(s)/guardian(s) are able to participate in.
- Where schools have more than one candidate being interviewed the students may be allocated to different interview venues and different arrival times.
- Further advice about the interview process is available here- <http://www.arkwright.org.uk/how-to-apply/interview> .