

Renishaw Education Outreach - School Information Pack

Supporting local schools to raise awareness of STEM careers.

About Renishaw

Renishaw is one of the world's leading engineering and scientific technology companies, with expertise in precision measurement and healthcare. The company supplies products and services used in applications as diverse as jet engine and wind turbine manufacture, through to dentistry and brain surgery. It is also a world leader in the field of additive manufacturing (also referred to as 3D printing), where it designs and makes industrial machines which 'print' parts from metal powder.

The Renishaw Group currently has 80 offices in 36 countries, with 5,000 employees, of which over 3,000 people are employed within the UK. The majority of the company's R&D and manufacturing is carried out in the UK and for the year ended June 2019 Renishaw achieved sales of £574 million, of which 94% was due to exports.



Education Outreach

We have a small team in the South West, based at our New Mills headquarters in Wotton-under-Edge dedicated to supporting our local schools with our education outreach programme. We are lucky to be supported by over 150 STEM Ambassadors from different roles across the business, especially, current graduates and apprentices to help students to see how great and achievable a career in engineering can be.



What are our aims and Objectives?

- Raising awareness of Renishaw's opportunities for young people – promotion of apprenticeships, placements and our graduate scheme through careers events
- Inspiring the next generation of engineers through STEM activities, visits and events
- Raising awareness of the breadth of careers within STEM
- Encouraging more diversity in the Engineering sector by engaging with a broad spectrum of students



How can we support you?

- School visits to New Mills
- Engineering, Software and Commercial work experience weeks
- Careers Fairs
- Career Talks / Assembly Talks
- Technology Teardowns
- Open events including annual information evening for young people
- Events promoting Women in Engineering
- STEM activity days/events/festivals
- Mock Interviews/Employability events



Workshops and school visits to Renishaw plc

Our workshops are completely free and can also be specifically tailored to meet individual school curriculum needs – we're here to help. We want students to discover the exciting world of engineering and really consider it as a future career option. The workshops are suitable for students in key stage 3, 4 and 5 and will be adapted to suit the group we are hosting.

All workshops will last between 2 – 3 hours, we have AM and PM sessions available and will take place in the Renishaw Innovation Centre, Renishaw plc, Wotton-under-Edge, Gloucestershire, GL12 8JR. Dates can be arranged to suit your school, applications can be made by requesting a date directly by email (education@renishaw.com). Where possible we request that if schools would like to bring several groups they try and book it over consecutive days or ideally an AM and PM slot on the same day. The minimum number of students we will accommodate is 15 and the maximum is 35 for all workshops but the Technology Teardown where the maximum is 20 because of the nature of the activity, more details about the workshops we offer can be found attached to this document.

Refreshments will be provided during the visit but unfortunately, we do not provide facilities for lunch. If appropriate, please inform us in advance if any students attending will need any additional support or special considerations and we will do our best to accommodate. Risk assessments for our visits and all of our activities are available upon request.

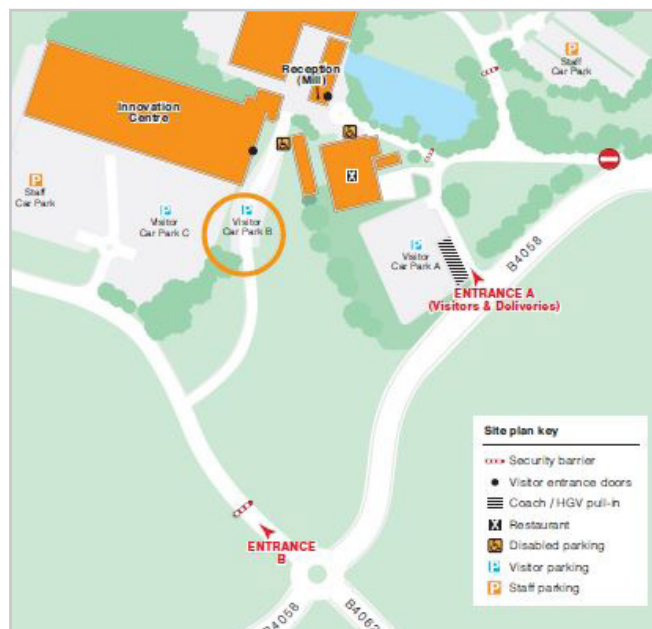
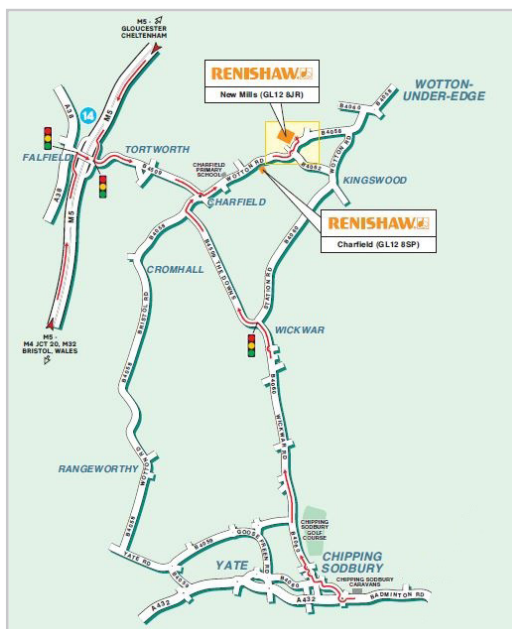
Pupils must be accompanied by a qualified teacher whose subject is related to the workshop being held. We would encourage the teacher to be involved with the workshop as much as possible. During your visit please be mindful that the workshop will be taking place in our visitor centre, there may be staff meetings or customer visits taking place at the same time. We expect the teaching staff from your school that will be supporting the visit:

- By ensuring the students respect company property and are well behaved
- Always supervising the students, including going to and from the toilets
- Supporting the Renishaw staff by getting involved with the activities we are running

Please arrive 5 minutes before your workshop is due to start workshop as the agenda for the visit will be quite tight. If you are running late please contact 01453 522130.

Please use Entrance B which is located on the roundabout at the junction of the B4058 and B4062.

Below is a site map, please get the coach or minibus to pull-up outside the Innovation Centre in Car Park B you then need to head straight to the Innovation Centre (marked on the map) you do not need to check in at main reception. If the coach or minibus is staying on site for the duration of the visit there is a coach / HGV pull in marked on the map.



Consider a career in engineering

2 hour workshop

This visit gives you an insight into what we do at Renishaw, you can also learn about the different roles within an engineering company and what a great career it can be!

This visit includes a presentation on Renishaw, information on our career opportunities for young people, plus the opportunity to have a tour of our demonstration facilities in our state of the art Innovation Centre. We also like to include a quick hands on activity at the end of the session bringing engineering alive!

What are the benefits to pupils attending this course?

- Learn about a local high technology engineering company
- Understand what roles there are within engineering
- Find out about career opportunities available to young people
- Have fun making your own engineering project!

Who would benefit from attending?

- Key stage 3, 4 and 5 students

Curriculum links

Key stage 3 Design and Technology

- Understand developments in design and technology, its impact on individuals, society and the environment, and the responsibilities of designers, engineers and technologists.
- Investigate new and emerging technologies.



Careers Learning

- Work-related learning - collecting relevant information about opportunities available beyond key stage 4.
- Understanding different career pathways and the importance of attitudes, qualifications and skills to employers.
- The opportunity to experience different working environments.

My Skills My Life workshop

2 hour workshop - Designed by WISE (Women in Science & Engineering)

'My Skills My Life' is a revolutionary approach to engage girls with careers in Science, Technology, Engineering and Maths (STEM).

'My Skills My Life' uses the natural tendency of girls to articulate their self-identity using adjectives, to show them that people like them are happy and successful working in careers in STEM.

This visit to Renishaw will give you an insight into what we do, along with a quiz which will help you identify what sort of role you might be suited to in the future as a career. The visit will include the following: A brief tour of the Renishaw Innovation Centre, introductory activity, 'My Skills My Life' activity, Job Types Analysis, Case Studies or Role Models, an interactive activity to take away.

What are the benefits to pupils attending this course?

- Learn about a local high technology engineering company
- Learn about the skills you have and how they can be applied to different roles
- Find out what different careers are available to young people
- Having fun with an interactive mini-project

Who should attend?

- Girls aged 11-18 studying STEM subjects and wanting to look further at possible career options.

Careers learning

- Work-related learning - collecting relevant information about opportunities available beyond key stage 4.
- Understanding different career pathways and the importance of attitudes, qualifications and skills to employers.
- The opportunity to experience different working environments.



Technology Teardown

3 hour workshop

This practical hands on workshop will look at product analysis of different every day products. It involves taking apart a range of consumer and industrial electromechanical devices; e.g. printers, phones, laptops and hard-drives. The aim is to understand the technologies and techniques used so that we can design better products!

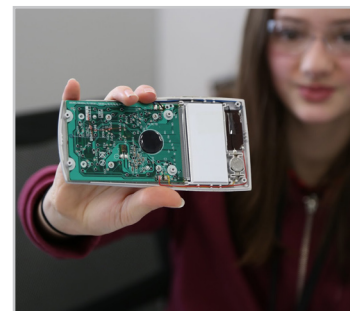
A tour of our demonstration area and a careers talk can also be included in this practical workshop

What are the benefits to pupils attending this course?

- Develop problem solving skills
- Understand how a product is made
- Pupils will design with more imagination once they understand technologies

Who would benefit most from attending?

- Key stage 3 year 9 pupils taking technology GCSE subjects
- GCSE Design & Technology
- Engineering pupils
- A level Product Design pupils



Curriculum links

- Learn about the properties and characteristics of materials and products; apply this knowledge when designing and making products. (Design and Technology Key Stage 3).
- Explore and investigate existing products to inform possible specification points for designing (GCSE Design and Technology 2017 – Core skills)
- Product analysis, reverse engineering, aesthetic detailing and technological performance of components (AS and A Level in Design and Technology 2017 – Core technical principles)

Measurement workshop

2 hour workshop

Measurement is our speciality and this workshop offers students the chance to understand the importance of it in advanced manufacturing.

This visit will include a presentation on Renishaw, a tour of our Innovation centre and the opportunity to find out more about careers opportunities for young people. We also like to include a quick hands on activity at the end of the session bringing engineering alive.

What are the benefits to pupils attending this course?

- Learn about a local high technology engineering company and see their products in action
- Understand the history and importance of measurement in manufacturing
- Have fun working on a mini Engineering activity

Who would benefit from attending?

- Key stage 3, 4 and 5 students

Curriculum links

Key stage 3 Design and Technology

- Understand developments in design and technology, its impact on individuals, society and the environment, and the responsibilities of designers, engineers and technologists.
- Develop specifications to inform the design of innovative, functional, appealing products that respond to needs in a variety of situations.



Careers Learning

- Work-related learning - collecting relevant information about opportunities available beyond key stage 4.
- Understanding different career pathways and the importance of attitudes, qualifications and skills to employers.
- The opportunity to experience different working environments.