

Renishaw Education Outreach

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. cameras, phones, laptops and hard-drives. The aim is to understand the technologies and techniques used so we design better products!

A tour of the manufacturing facility, additive manufacturing (3D printing) labs and a careers talk will end this exciting hands on practical workshop.

Biscuits and refreshments will be served during the 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

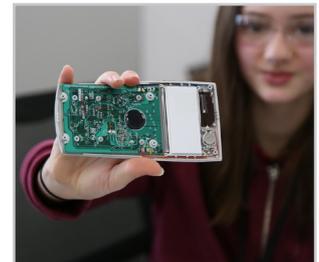
Who should attend?

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



Curriculum links

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



Venue: Renishaw plc, Fabrication Development Centre, Miskin Business Park, Pontyclun, RCT CF72 8XY

Time: 09:15 to 12:15 (times can be changed to suit your school day)

Cost: FREE- Just bring enthusiastic young people with an interest in engineering -15 pupils per workshop*

Date: Dates can be arranged to suit your school. Applications can be made by requesting a date directly by email or phone



*Please note - Pupils must be accompanied by a qualified teacher that is teaching a related subject to the workshop being held. We would encourage the teacher to be involved with the workshop as much as possible.

For more information, visit www.renishaw.com or contact education@renishaw.com



Renishaw in Wales

In 2011 the purchase of the 461,000 sq ft former Bosch facility and associated land near Miskin, South Wales gave Renishaw the space and opportunity it needed to support its growth and development. By the end of 2015, Renishaw had invested nearly £40m in the site acquisition and refurbishment and in the purchase of plant and machinery. It has already created over 250 new jobs and has well developed plans for the site to support research and development and manufacturing in new areas of its business. The co-location of research and development, design, and manufacturing functions at Miskin provides many advantages. Better communication, design for manufacture, shorter product development times and more responsive design and test capabilities can be significant advantages for research and development projects.

Building on and creating new, strong relationships with research and educational organisations in Wales, Renishaw is leveraging its skills and experience in metrology and additive manufacturing to create exciting new developments in healthcare. The proximity of the Miskin site to good transport links and a wide variety of potential collaboration partners in life sciences, with support from national and local government, will give Renishaw the opportunity to create new centres of expertise and new jobs. Renishaw has opened a Healthcare Centre of Excellence at its Miskin site to provide manufacturing capacity for medical parts as well as facilities for training, demonstrations and research.



Highlights to date and future plans

- £40m outlay on site acquisition, refurbishment and production plant and machinery by the end of 2015
- Over 300 employees on site with open vacancies for a range of manufacturing and research roles
- Assembly of the only UK manufactured metal additive manufacturing (3D printing) machines
- Electronics assembly including latest surface mount technology for PCB assembly
- Metal part machining using the latest CNC (computer numerically controlled) machine tools and robot technology
- Planning application approved for development at the Renishaw Miskin site. The planned facilities provide additional capacity for Renishaw and for other businesses to establish operations at Miskin, providing many more employment opportunities

For more information, visit www.renishaw.com or contact Simon Biggs by phone (01443 221727) or email (simon.biggs@renishaw.com)



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