



Single school Science & Technology Activity Days for Years 7-11

What are the Activity Days for?

The activity days are designed to raise enthusiasm for STEM subjects and to encourage young people to consider studying them at college and university.

What happens?

Five/six consecutive sessions are arranged throughout the school day, each involving up to 30 young people, working in groups of three.

These sessions can be made up of any of our science and technology or medical careers activities, as outlined on our website. We can also run an after-school talk about how to apply to medical school. Further details of some of our activities are on the next page. Each of our activities are designed to provide young people with a practical insight into the application of science and technology.

Young people are encouraged to work together and to plan their work within time constraints. They are assisted by members of our team of university students.

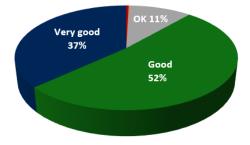
Throughout the event, there will be the opportunity for young people to ask questions about university.

How are they rated?

In June / July we hold mixed school Science & Technology Challenge Days which involve our E-FIT, robotics, diagnostics and electric car activities. In 2023 these involved 154 schools. Evaluations of these events indicated that:

98% of the teachers and 89% of the young people considered their Challenge Day to have been 'good' or 'very good'.

YOUNG PEOPLE'S OVERALL EVALUATION RESULTS



Importance of STEM

The UK engineering and manufacturing industry employs 5 million people. Despite this the Institution of Engineering and Technology estimate that there is a shortfall of workers in the STEM sector which equates to an average of 10 unfilled roles per business¹



The Robotics Challenge

Each team is provided with a Lego Mindstorm EV3 robot, which they programme to navigate around a course. Initially they consider how to make the robot move and respond to black lines. They then consider how to programme it to respond to different colours and use the infrared sensors.

The E-FIT Challenge

Having witnessed a simulated crime, each team uses the latest E-FIT 7 facial recognition software (as used by 90% of UK police forces) to create a computer image of a 'thief'. They also consider the limitations of memory and facial recognition, and how this can affect police investigations.





The Medical Diagnostics Challenge

Each team undertakes the role of a doctor, diagnosing conditions suffered by simulated patients. They consider the four stages of assessing a patient and learn how to take vital signs, listen to breathing, test 'urine' samples and examine chest X-rays.

How do I make a booking?

The total cost for up to six consecutive sessions, each involving up to 30 young people is £1,030 + VAT. If you'd like more than one activity session run simultaneously, the costs can be found if you <u>click here</u>. To book an event for your school please email John Waterworth, Events Organiser MCS Projects Ltd. E: john.waterworth@mcsprojectsltd.co.uk T: 07725 817009