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Robotics Challenge 2009

This is a full day activity during which students are shown how to design and build a robot, able to carry out a range of tasks in environments potentially hazardous or difficult for people to work in. The activity day is linked to the National Curriculum and students will be using the Lego 'Mindstorms' Programmable Computer System.

The day is always great fun and challenging, and is always very popular with the young people who take part. The day is offered to 50 students, with prizes being awarded to the winning team in a ceremony-like event.

The opportunities for young people in these new exciting disciplines are literally limitless, Robots and Mechatronics are currently the fastest and most exciting growth areas in Engineering, and the sky is literally the limit as more and more ideas are developed to improve the way we live and do things.

Mechatronics is the combination of mechanical engineering, electronic engineering and computer engineering. Robotic and Mechatronic systems are revolutionising industry-based manufacturing, warehousing, distribution and assembly processes. Applications within the medical fields are predicted to be almost 'limitless'. With the ever-changing needs and wants of a complex and sophisticated world, innovations and technologies will have to improve and develop with the rapidly changing times. Robots not only master repetitive and dangerous tasks, but they do it at low cost and with lower margins of error. Companies using robotics will have the luxury of keeping work within their own plants rather then exporting it over seas.

Pupils also have the opportunity during the day to achieve their Bronze 'CREST' award. CREST (CREativity in Science and Technology) is a UK-wide Science, Technology, Engineering and Maths (STEM) award scheme managed by the British Science Association.

Robotics Challenge Days 2006

"Girls can make it in Engineering and Technology" and "Robot daze for Boyz"

Six schools from South Somerset and West Dorset attended these two similar Aimhigher activity days which were hosted by Yeovil College and facilitated by the newly formed Setpoint Somerset. These two challenging full-day events were attended by 61 Year 9 girls and 60 Year 9 boys who had expressed an interest in attending an activity day linked to a specific Hi-Tech branch of engineering that offers young people of either gender, a range of exciting career opportunities in Robotics, Control Systems and the relatively new technology of 'Mechatronics'. These are rapidly expanding technologies and there are an excellent range of study opportunities offered by the Higher Education Institutions right across the country leading to exciting, challenging and rewarding career opportunities in these technologically advanced fields. During the day, the pupils worked in teams of four and they learned how to design, construct, programme and test robots that could perform a range of tasks independently, in environments that are potentially hazardous or difficult for human beings to work in.

The activity day was carefully linked to the school curriculum and focused on a number of agendas; ecological and environmental considerations and development of inter-personal skills needed to be successful both in industry and at degree level study. The day included a group presentation linked to the development of these technologies in the future.

The day was both very successful and enjoyable, with 97% of the students reporting that they had enjoyed the activity. Also 98% stated that following this event they would now consider going to university. An Aimhigher Trophy was presented to the winning teams from each day and all students received a certificate recognising their achievements.