Share with Pride

Engineering Education Scheme (EES)

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S&C Collaboration
What is the ‘Engineering Education Scheme’ (EES)?

Engineering Education Scheme (England) provides young people with an insight into the world of engineering.

How?

► Groups of four Year 12 students (aged 16-17) were presented with a ‘real’ challenge Network Rail faces.

► Each group were supported by two Network Rail ‘engineers’ over a 5 month period to devise a solution using science & technology that would provide long term benefits to the company.

► The teams all attended residential workshops at the University of Birmingham and Birmingham City University to progress projects.

► The teams prepare a report, display, prototype and presentation for assessment and accreditation at the Celebration & Assessment Day.
For Example: The Challenge… ‘Dusty Ballast’

► The students were faced with the challenge of devising a cost effective, environmentally friendly way of reducing ballast dust

► They devised a number of concepts which they tested to determine their feasibility

► The students visited a S&C renewals site to understand how their model could be utilised

► They attended a residential workshop to create a prototype of their chosen design
The Result…

► An auto pump water wagon system with a timer device to humidify ballast on arrival to site

Benefits?

► Address’ Health and Safety considerations
► Environmentally friendly- Recycling water, potential to use renewable energy sources
► Potential to devise IPhone/ IPad applications
► Utilises existing haulage mechanisms
How can you help?

EES takes place on an annual basis:

► You could volunteer to become a mentor on the scheme

► Suggest concepts/ challenges that the teams could use to create a business solution

► Attend a session to expose the students to a variety of engineering projects you may be involved in and the multi-disciplinary nature of the rail industry

► Support a team by offering site visit/ tours

► Attend the celebration day to support the engineer/ mentors

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