

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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