

ice

London

Institution of Civil Engineers

#ICanEngineer Competition

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Future Engineers Scheme

#ICanEngineer Competition

Design a new rail station in London to connect the Isle of Dogs to the O2 Arena.

Deadline: Monday 24th January 2022

The competition is aimed at school years 8-10. There will be an awards event (date TBC) after shortlisting for the best "Future Engineers Scheme" entries and the winners of the #ICanEngineer Competition.

Entries to be sent to: icanengineer@ice.org.uk

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#ICanEngineer Competition

Competition Outline

The ICE London Graduates & Students Committee are running a London-Wide competition as part of the Future Engineers Scheme for young people who are interested in Civil Engineering and how it shapes the world.

Rail infrastructure underpins our daily lives. They enable millions of people every day to get to work and school, to visit family and friends, and to experience new places. Railway stations have always been an iconic piece of cities, as the interface between passengers and the rail services. The world's first recorded railway station began service in 1807, in Swansea, Wales, when trains were horse drawn. Today, the fastest high-speed trains in the world can reach over 200mph. It's incredible how much railways have developed in over 200 years!

This year's competition involves continuing this innovation in rail! The Department for Transport wants to build a new Station in East London, with the aim of connecting the Isle of Dogs to the O2 Arena. The station can be built on either side of the river, or on the river itself similar to Blackfriars Station, but it must be designed with the possibility of it being connect to the London Underground network. The station should have no more than 4 platforms and contain at least 2 of the normal facilities found at stations (e.g. Toilets, Waiting Room, Coffee Kiosk, Bike Storage).

Your task is to design a new station, outlining how the new station will be powered, as well as considering how this will enhance the environmental benefits of the station as part of the Government's plan for a transition towards a net zero carbon economy. Therefore, sustainable energy sources must be considered. You must also come up with an architectural design for the station building - you are encouraged to get creative with this part and draw inspiration from iconic station buildings from all around the world!

Competition Guidelines

1. Entrants must design a new rail station to improve connections with London's existing transport network and improved passenger experience. The entrants must include the following details in their design:
 - A name for the station.
 - Location for the station.
 - What energy sources will be used to power the station, and this has considered sustainability - A sketch of the station building you have designed.
 - What materials will be used in the construction of the station.
 - How the station will benefit the local community and economy.
2. Entrants must provide their answers/solutions on max. two A3 pages either in word doc, pdf, scanned sketch/poster or photo.
3. Entrants may enter individually or in a team of 3-5 people.
4. Entrants will be disqualified if their idea copies an existing proposal or copies information verbatim from the internet.

Competition Prizes

The competition is aimed at school years 8-10. If government guidelines permit, we aim to have awards event in London (date TBC) for the winners of the #ICanEngineer competition'.

All submissions to be sent to: icanengineer@ice.org.uk

Competition Submission Deadline: Monday 24th January 2022

Competition Awards Evening: TBC

For Queries Please Contact: icanengineer@ice.org.uk

Please include #icanengineer in the subject line of all email enquiries.

We look forward to receiving your submissions – Good luck!

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