

Institution of Agricultural Engineers



2018 YOUNG ENGINEERS COMPETITION

Can your team create a remote or radio controlled vehicle to tackle our competition track?

TUESDAY 20 MARCH 2018

at Perkins Engines Company Limited, Peterborough, PE1 5FQ

www.iagre.org

Sponsors

Rexroth
Bosch Group

 **Perkins®**

 **AUTOGUIDE EQUIPMENT** 

**The
Douglas Bomford
Trust**



INTRODUCTION

The Institution of Agricultural Engineers (IAgrE) is a professional membership organisation for all those working, or with an interest in, engineering, science and technology within agriculture and the environment.

We are one of the 35 professional institutions licenced to the Engineering Council, and encourage the benefits of a career in engineering – particularly within our sector which encompasses so many aspects of food production and the care of our most valuable natural resources.

Started in 2003, the IAgrE National Young Engineers Competition offers teams the opportunity to build a vehicle within a set of rules and to win significant prizes using a combination of engineering skill, strategy - and luck.

Since its inception the Competition has been staged at some of the country's leading engineering companies such as Jaguar, Aston Martin, Caterpillar and Kubota who all have wholeheartedly embraced the competition objectives. They have always provided a warm and generous welcome and of the opportunity to see their activities at first hand.

We aim to make the event both entertaining and educational, it is a great opportunity to meet other students and people in our brilliant industry, whilst possibly opening doors to future employment.

ENTRIES

The competition is open to teams from Landbased Colleges, University Technical Colleges and from school Sixth Forms. There is no charge for entering the competition.



THE CHALLENGE

Given a set of standard wheels, a battery and maximum dimensions, teams will create a remote or radio controlled vehicle to produce the best performance on a standard track.

EQUIPMENT

A kit of wheels and a battery will be supplied to registered teams, from any discipline, together with a drawing of the test track, which is made from sheets of pegboard and a metal.

TEAMS

Whilst any number may be involved in the vehicle construction, only two members will be allowed to attend the actual event. In view of the prestigious nature of the competition venues, we expect competitors and staff, to dress (smart casual) and conduct themselves in the manner of professional engineers.

CLASSES

To accommodate entrepreneurial designs, there will be two classes:

Class 1 for those entries meeting the design criteria.

Class 2 For those not meeting the design criteria.

Please note, the required dimensions (as in 1 above) are obligatory in all cases. But nevertheless deemed eligible to compete by the judges.



AWARDS

A Prize Fund totalling £1300 is provided by the Institution of Agricultural Engineers (IAgrE). The competition's generous sponsors are Bosch Rexroth who provide tools as prizes, 2018 competition hosts the Perkins Engines Company Limited, Autoguide Equipment for the manufacture and supply of the test track and the Douglas Bomford Trust.

SCENES FROM THE 2017 COMPETITION

The 2017 Competition was staged at the state of the art Training School of Kubota UK at Thame in Oxfordshire on 4 April.

The winning team came from the Institute of Technology Tralee, who brought two teams and had travelled overnight from the west coast of Ireland. Easton and Otley College took runners-up spot with a second IT Tralee team in third place. Other competitors included John Deere, the JCB Academy, Scottish Rural University College and Plumpton College.

2018 COMPETITION

DATE:
TUESDAY 20 MARCH 2018

VENUE:
**PERKINS ENGINES
COMPANY LIMITED,
PETERBOROUGH PE1 5FQ**

The 2018 Young Engineers Competition is being staged at the Peterborough manufacturing plant of the Perkins Engines Company Limited. With a history stretching back 85 years, Perkins (part of Caterpillar Inc since 1998) is one of the world's leading providers of diesel and gas engines. The Peterborough facility has the capacity to produce up to 500,000 engines a year in a 125,000 square metre factory containing the latest automated and computer-controlled equipment.





FURTHER INFORMATION AND COMPETITION PACK

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