

8 July 2011 Last updated at 07:37 GMT

## **RoboCup for soccer-playing robots kicks off**

**The best strikers, defenders and midfield players in the robot football world are gathering in Istanbul.**

The teams and their coaches are there for the climax of the 2011 non-human soccer calendar - the RoboCup.

The competition sees teams from all around the world pit their creations, be they made from bolts or bytes, against other robot teams.

The 2011 tournament includes one of the UK's first robot football teams.

### **Team human**

Now in its 14th year, the RoboCup was set up with the aim of creating, by 2050, a team of humanoid robots that can take on and beat the best human players.

The competition aims to encourage innovation in robot building by getting roboteers to tackle the many problems that playing football embodies.

Not only do team coaches have to conquer basic problems such as vision, but they also have to work on how to get their players acting as a team. All robots playing the game have to be autonomous - although the machines can swap information wirelessly. Play must also be fair as no barging, blocking or touching is allowed.

UK team Edinferno from the University of Edinburgh has won a place in the final and is up against 27 other teams in what is known as the "standard platform" league.

Every team in this league uses humanoid Nao robots made by French firm Aldebaran Robotics. The robots are standard but the on-board software controlling their sensors, actuators and limbs is custom-written to try to make the best of the machine's capabilities.

The UK also has an interest in the Noxious Kouretes team that is coached by the Technical University of Crete as well as the University of Wales and Oxford University.

In addition, a number of UK schools have qualified for the junior competition.

Other leagues at the tournament will see competition among simulated players (both 2D and 3D), small robots, medium-sized robots and teams made of humanoid robots.

In 2010, about 500 teams from about 40 nations - including Iran, Taiwan and Chile - took part in the RoboCup's various tournaments.

In recent years, the tournament has grown to include more than just football. Allied competitions cover domestic robots that carry out chores around the house and rescue robots that help emergency services.

## [More Technology stories](#)



[Secret agents raid webcam artist](#)

[\[/news/technology-14080438\]](#)

The US Secret Service has raided the home of an artist who collected images from webcams in a New York Apple store.

[First solar park due to power up](#)

[\[/news/uk-wales-14073447\]](#)

[Yahoo criticised over e-mail scans](#)

[\[/newsbeat/14077856\]](#)



**BBC © 2011** [The BBC is not responsible for the content of external sites. Read more.](#)