Coventry & Warwickshire Schools Liaison Community

Sponsored STEAM Presentations

Presentations are about 40-60 minutes, preferably to more than 50 pupils.
To arrange an event please email dwilleruk@yahoo.com
Most speakers are willing to give short presentations on their careers to school assemblies.
www.schoolsliaisoncommuntiy.net

Electric Vehicles and the Rocky Road to Green Transportation

Peter James, Lyra Electronics Ltd.

Hybrid or all electric? What advantages? What are the problems? And what do we need to do to achieve "all electric" by 2040? Are there other power systems available?

Construction on Soft Soils - From Hills to the Sea

Dr Shervin Motamedi

A talk about climate change and its effect on coastal areas and how it impacted tropical mangroves. How civil engineers can build with nature.

Dr. Motamedi is an Assistant Professor at Coventry University School of Energy, Construction and Environment

A history of Robots

Derrick Willer MBE

When were robots first thought about, what is necessary to make a robot work, through yester-year's examples to today's applications.

A History Of The Land Speed Record

Willy Goldsmidt

Willy will outline the attempts to gain the world land speed record for cars.

Godiva Awakes, Cyclopedia and Humming Bird Project

Roger Medwell MBE, Godiva Awakes working party

Roger will describe this project to create this giant puppet and demonstrate the "cyclopedia" and the new Humming Bird.

We're Hear For You Joseph Squire

Founder of We're Hear For You

Creating a passion for learning.
This workshop captures children's and young people's imaginations and reshapes their idea of learning through discussion-led PSHE workshops.
.(Personal, social, health and economic education)

www.werehearforyou.org.uk

We're Hear For You

Building Resilience For Life

What We Need To Do To Solve The Energy Crisis

Amanda May, National Grid

Firstly we must take action to stop global warming
But we must also provide for changing to electric vehicles, cars, lorries, trains, aeroplanes and ships

Energy storage and the problem of electric cars

Graham Prebble

Currently there are major problems with battery life but these may soon be solved. As the number of electric cars increases how will the National infrastructure cope with the demand for electricity? Finally, how will we pay for this?

Harrier Jump Jet and Formula Student

Visit to Coventry University Engineering

This visit enables pupils to climb into the Harrier cockpit and also see the students' work for Formula Student and other automotive projects.

Coventry University

Ethical Issues for Connected & Autonomous Vehicles

Dr. Paula Palade, Jaguar Land Rover

Dr. Palade worked on a report commissioned by the European Commission for autonomous and connected driving looking at the ethical, societal, data security and privacy aspects that she hopes will influence EU legislation.

Her presentations will outline the problems faced by AV systems and the possible consequences of the decisions made.

Save The Bees

Saving the Bees with Maths

Dr. Martine Barons, University of Warwick

There is much concern about declining insect populations and what this might mean for human food and survival. The pollinator system is part of an interconnected ecosystem, which we don't know completely. How is it possible to make good decisions with so much uncertainty? And how on earth can mathematics help? Dr Barons will demonstrate how we can combine data and information from different experts to ensure our insects survive and thrive.

A career In Distribution of Electricity across the UK

Amanda May, National Grid

Amanda is an engineer in Group Policy Making and as Programme Manager having graduated in Electrical Engineering at Durham University

nationalgrid

A career In Engineering

Marcell Batson-Warner

An engineer having worked in cars, cans, cheese and cars again, Marcell is an engaging and amusing speaker who will enthral both girls and boys. She explains how engineering can be a rewarding, fun career.

USA, Arctic and Indonesian Eclipses

Mike Frost, Amateur Astronomer.

Mike will intrigue pupils with descriptions of his recent travels to see eclipses of the sun in the far north, on the equator and USA.

Mike has other presentations, www.mikefrost.info

Graphic Design

Michelle Abrahall, Graphic Designer, Illustrator & Copywriter

Michelle will describe her career working with businesses of all areas, from accountants to self-published authors, showing examples of her work

Blending behavioural science, computer science, data analytics, engineering, and business model innovation.

Ganna Pogrebna, Professor of Behavioural Science at University of Birmingham

Ganna will outline her work to help cities, businesses, charities, and individuals to better understand why they make decisions they make and how they can optimize their behaviour to achieve improved results

Model Engineering at its Best - Visit to Echills Wood Model Railway

Wednesdays in June/July

2 hours our including a tour of the 2Km track, the engine sheds, workshops, etc. and a ride on one of the trains. Maximum 16 per school party. Kingsbury Water Park 10:45am. and 12:45pm. Please note that the school is responsible for transport and the car parking charge.

Track Safe

Derrick Willer MBE

Derrick leads the pupils to put together a bid for funding this implementation in Atlanta, Georgia USA. He also outlines the salaries that engineers and technicians can earn.

Derrick has a presentation on his career that has taken hm across the worlds.

How We Won Fastest Car at F1 In Schools

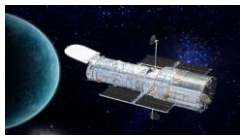
Abi Hirons and Eddie Hodierne

Abi and Eddie were part of the team from WMG Academy For Young Engineers who won the UK Final and went on to win fastest car at the International Finals in Kuala Lumpur. The team had to engineer their car using CADCAM and CAFD to determine the drag on their car which reached 70mph in less than 1 second.

A History OF Robots

Marcell Batson-Warner

When were robots first thought about, what is necessary to make a robot work, through yester-year's examples to today's applications.



Exo-Planets and the Search for Alien Life

Thomas Killestine (End of Summer Term Only)

Thomas will outline current methods of searching for life in our solar system and in others for earth like planets.. Thomas, age 21, won the Sir Patrick Moore

Free yourself: become an engineer.

Kim Everett, Powertrain Engineer, Aston Martin Lagonda Ltd.

Kim will describe her education and career

CERN and the Large Hadron Collider

Prof David Evans, CERN and University of Birmingham

Collide two protons together at almost the speed of light and what do you get. Sparks, Quarks, Whatever?

Effective Communication

Yichan Cai, Management Consultant, FunKeyB

Good communications are essential in almost all walks of life. But many are usually full of jargon that is unintelligible outside the particular work sector, nationality, religion or age. Yichan will try to debunk jargon and explain how to communicate clearly with others with different jobs or cultures.

Jack and Jill left for a wee break!

Scotland √

England X

How To Win First® Lego® League

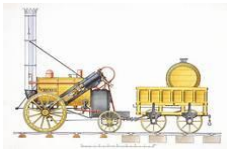
Girls and Boys from Coundon Court School

The team won the Midlands event in 2019 and competed in the UK final. They were invited to the global finals. They are happy to present their achievements to other local schools.

A History of Transport

Derrick Willer MBE

From Shanks's Pony to the modern transport – sea, land, air, space. the future?



Product Design

Nicole Analise Cox, Intern Engineer, Siemens

Nicole will describe life at university and how her internship at Siemens has helped her.

Nicole works on exciting projects to do with the railway, and even how we can use data to predict the future.

Your future career is in your hands. But how to get there?

Kelvin Lin, Graduated in Law and taught in a University but has now chosen to progress in a career of photography.

	and the exciting world of Aston Martin Lagonda.	
	**Spacecraft Are Robots** **Dave Eagle, Amateur Astronomer** Dave will outline the way spacecraft have to work and also that they must have robotic control systems. The time taken for a signal from Earth to reach them means that the spacecraft must know exactly where it is and when to fire it's control thrustors to enable it to manoeuvre correctly. Dave also has a 6M dia. Planetarium for hire. Please see www.star-gazing.co.uk They have to make a small charge for the planetarium	
	**Being a Woman in a Man's World' – A Career in Engineering** **Lisa Cobble, Director Global Sales Operations, GE Digital and Exceed Coaching** In 1995, there were not many girls leaving school to go into Engineering, Lisa was one of 2 in her company to start as an apprentice. Currently around 12% of all engineers are female in the UK. Discover what a career in Engineering can open up and take the opportunity to learn about how being 'different' can be advantageous!	
	**Art Design In The Transport Sector** **Dr. Aysar Ghassan** Dr. Ghassan heads Coventry University's Automotive and Transport sector and his presentation brings Art-Design into the Engineering Sector. He describes his work and invites pupils to create their own designs.	
	**Women Engineering The Railway** **Vanessa Stanley, Siemens, York** Vanessa outlines her route into engineering and describes her role with Siemens designing and delivering Protection & Control solutions to UK Rail systems and her roles as an IET Young Professional. Zoom or Teams presentation only because Vanessa lives in Yorkshire.	
	**March Of The Robots** **Simon and Lyn Proctor** This presentation outlines the method of programming the toy robot. The Proctors can also bring Meccano robots for the pupils to code and "march". There is a small charge for bringing the robots	

	Kelvin can advise on the education and career paths to follow for a successful career outcome.	
	**Engineering Your Career** **Derrick Willer MBE** Outlining his career and an engineer which has taken him to many countries across the world, Derrick advises pupils on selecting a career based on their skills, the qualifications needed, the market place and possible salaries.	
	**Tomorrow's Engineers Competition** **Girls from Coundon Court School** The team that entered the finals of this competition at the Big Bang Fair 2018 after winning the local finals in Coventry They are happy to present their achievements to other local schools.	
	**Gaynor Sharpe and Linda Atherton** **Robot Activities** Gaynor and Linda are qualified science teachers and volunteers with the Association of Science Educators. They bring robots for the pupils to build and control. They can also present om Women in Science	
	**Frederick Lanchester – the unknown pioneer of UK aerospace.** **Dr. Caroline Lambert, Coventry University** In 1892 Frederick Lanchester, whilst crossing the Atlantic, noticed the way herring gulls used up-currents of air to rise up without flapping their wings. He then began to study aviation	
	**Flux-Dance** **Charlotte Hale-Smith, Stephanie Townsend** Combining dance with science and robots. They have to make a small charge	

Believe in yourself - Why we shouldn't feel imposter syndrome

Dr Shervin Motamedi

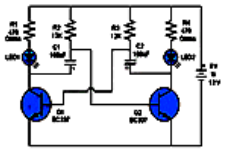
My journey from an underprivileged child living in poverty to a CEng and having my dreams come true - to teach at a university.

Dr. Motamedi is an Assistant Professor at Coventry University School of Energy, Construction and Environment

Electronics Made Easy for Young Engineers

Naim Kapadia, The MTC

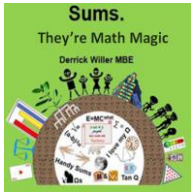
Electronic Made Easy for Young Engineers (EMEYE) is a new program to help young engineers (12 years+) to understand electronics and help schools and community in the Midlands area.



Sums, They.re Math Magic.

Derrick Willer MBE

A fun lecture to inspire pupils about maths involving pupils and teachers. Including how aliens might count, card tricks, measuring square roots and "handy multiplication".



Dark Matter. Is it Dark? Does It Matter

Mike Frost, Amateur Astronomer.

Mike will intrigue pupils with his description of Dark Matter.
Can we see it? Can we detect t? How does it affect us?
Mike has other presentations, www.mikefrost.info

Saving The Environment

Tony McNally

An outline on how the pupils and schools can contribute to reducing climate change and harmful emissions

Tony is the MD of Climate |change Solutions