

## Aberystwyth University Faculty of Business and Physical Sciences Outreach Activities

Due to the current Covid-19 situation this list has been temporarily adjusted to only include workshops that can be run remotely. For a more up-to-date list, please visit our Outreach Hub at <a href="https://users.aber.ac.uk/nar25/index.html">https://users.aber.ac.uk/nar25/index.html</a>

Title	Audience(s)*	Activity Type	Summary
Planetary Exploration	Yr 9-13	Presentation	A presentation on planets in and beyond our solar system.
Worlds Around Distant Stars	Yr 11-13	Presentation and Workshop	How can we use a star's spectrum to find and explore exoplanets?
Diamonds	Yr 11-13	Presentation and Workshop	The properties of diamond and how they are being used in new technology.
Non-Transitive Dice	Yr 10-13	Workshop	A workshop using non-standard dice to explore the idea of transitivity in mathematics. Uses <b>probability</b> and <b>counting</b> arguments.
Bubbles	Yr 11-13	Presentation and Workshop	A workshop on the mathematics of soap films. Covers <b>trigonometry</b> and <b>calculus</b> (turning points).
Dragon Racing	Yr 5-9	Workshop	A workshop to start exploring <b>probability</b> through dice games
Artificial Intelligence	Yr 9-13	Interactive Presentation	What is 'intelligence'? Can a machine be 'intelligent'?
Robotics	Yr 4-13	Interactive Presentation	An introduction to robotics – What is a robot?

Lego Mindstorms	Yr 5-13	Workshop	Programming robots to perform tasks autonomously.
Humanoid Robot	Yr 5-13	Workshop	A fun team activity to demonstrate the complexities of programming robots
Program Says	Yr 1-4	Workshop	A workshop focused on early programming skills
Scratch	Yr 3-9	Workshop	Various workshops from introduction to programming through to creating animations and games.
Website Construction	Yr 5-13	Presentation and Workshop	How to design and create a website using HTML and CSS
Turtle Blocks: Regular Polygons	Yr 5-9	Workshop	A workshop on making drawing programs, using block programming, to produce specific shapes and patterns.
Fake News	Yr 10-13	Interactive Presentation	What is fake news? When did it start? How can we detect it? Why is it a problem?
Internet Security	Yr 7-9	Presentation and Workshop	How to keep yourself safe and secure online.
Marketing	Yr 9-13	Presentation and Workshop	A workshop looking at business growth and marketing.

<sup>\*</sup>The audience age is a guideline for existing workshop material; however, arrangements can be made to adjust material for different needs or age groups.

For more details and to book an activity, contact:

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