## Volunteering – School engineering workshops on the Balmoral

Exploring Hydraulics and Lifting – in the context of Bristol's Floating Harbour Held on the MV Balmoral moored outside M Shed Museum - BS1 4RN  $11^{th} - 20^{th}$  March 2016



Young people work in small groups with a volunteer to make a crane or robotic hydraulic arm from card, syringes and plastic tubing. They will go up and operate the iconic Bristol Cargo Cranes and visit the steam crane, winches and hydraulic systems in the dock as well as see demonstrations of modern lifting equipment.

## **Volunteers Role**

- Mentor and support a group of children completing a team build & operate challenge .
- supply the key messages -
  - that work is good fun, there are many different jobs to think about and work gives greater opportunity in life.
    - Teams make engineering work Engineers are needed in all sorts of places
- Help the children explore ideas that relate to the construction and the lifting and access industry.

## On the day

Arrive by 9.30 am at the Balmoral –a large passenger vessel moored outside M Shed . There will be a 20 min briefing.

**Teams** - one volunteer per group of 6 school students – You will know the age of the children in advance of the day

**Introductions** –You will be quizzed by the young people and introduced to the room.

**Crane Building** - Follow the instructions provided by the workshop leaders and help young hands and minds with anything they are struggling with.

**Site visits** – You will accompany your team to explore the Balmoral, go up in the Cargo Cranes (unless you have vertigo), meet modern lifting experts and explore the Steam Crane.

**Competing and presenting** - At the end of the session teams compete with the crane and present their learning about scientific principles and teamwork

## FAQ

Workshops are led by expert staff and teachers accompany the children All instructions are provided in stages as you go There is tea, coffee and biscuits on board, please bring lunch and warm clothes

Any questions and to volunteer contact - <u>hugh@myfuturemychoice.co.uk</u> 0117 3290387