


Risk assessment	 <p style="text-align: center;">UNIVERSITY OF LEEDS</p>
Title: Be Curious: The Engineering Experience	Risk Assessment ID:
Risk Assessment Site: Inst Computational & Systems Sciences	382012

Description of work activity
<p>Briefly describe the work activity including any subtasks: The EPSRC CDT in Fluid Dynamics is coordinating an event featuring 5 distinct activities for public engagement that will showcase elements of Engineering, for school children (KS3-KS4). This will be held on campus, and is being supported by the Education Outreach team (recruiting schools, student guides to help visitors find the rooms etc).</p> <ul style="list-style-type: none"> - Low Carbon Technologies – the art of a sustainable future. This activity will involve students working with PhD researchers via a fun board game to create a low carbon future for Yorkshire using a map and game tokens. Through this, they will understand more about how the energy system works, where to site infrastructure and how to consider environmental impacts. - Engineering flood defences. Students will work with PhD researchers to test scale models of functioning dams and practically investigate dam failures. They will then design flood defences by thinking about how best to alleviate flood risk in urban and rural areas. - Nuclear Engineering. In activity one, students will conduct a ‘whodunit’ to detect where a hidden radiation source is located within a city map, and investigate the natural radiation of everyday items with a Geiger counter. In activity two, students will work together to retrieve simulated nuclear waste from a cordoned off ‘hazard zone’. Please note these activities will not involve actual hazardous materials - Be a Bioengineer. During this activity, the students will work with PhD researchers to identify why bones break, and how to fix them through practical demonstrations (with plastic bones!) The students will understand all the factors we need to think about for designing devices that are implanted in the body – mechanical properties, function, and biocompatibility and see how fundamental engineering principles can be applied to the human body. - Programming robots. Students will use an app to programme lego mindstorms robots to complete tasks. The students will learn some programming skills and how they can be applied in a real world situation.

Hazards and Risk Ratings

Hazard Type	How might the hazard cause harm	Who may be harmed	Control measures	Action by
Fire	personal injury illness damage to property	People with individual needs Staff Students Visitors	The Event Organiser must ensure: - participants are briefed at the beginning of event regarding the location of the nearest fire call points and exits in case of evacuation - events with over 50 participants have at least one Faculty Fire warden is present outside normal working hours (9am-5pm) - that a personal evacuation plan (PEEP) is created for any participant with a disability - no emergency exits or isles are blocked or restricted	Event Organiser
First aid cover	inability to sustain life until medical experts arrive	People with individual needs Staff Students Visitors	The Event Organiser must ensure that: - any event from 5pm onwards with more than 50 people attending must have at least one Faculty of Engineering First Aider present - personnel involved are aware of how to summon Faculty first aiders during normal working hours (tel 39393 First Aid Procedures) - events with less than 50 people attending must contact Security	Event Organiser

			Services (tel 32222) outside normal working hours for First Aid cover	
Release and exposure to hazardous substances	Personal injury and illness	Staff Students Visitors	Event Organiser must ensure that: - presenter has produced a risk assessment for the activity prior to event, if unsure contact Faculty Safety Office - contingency measures must be arranged prior to event accounting for accidental spillage or release - presenter removes all items and any waste products after activity	Event Organiser
Sprains, strains, slips, trips and falls	personal injury, damage to property	People with individual needs Staff Students Visiting staff Visitors	The Event Organiser must ensure: - adequate notice is given to the Faculty Fabrics Manager if furniture requires re-arranging prior to the event - staff and students who may assist in moving furniture prior or post event are trained in manual handling techniques (Complywise). - any significant manual handling risks identified generates a person specific assessment before manual handling occurs - furniture is returned to pre event locations by prior arrangement with Faculty Fabrics Manager - participants are informed during briefing to report spillages which should be immediately cleaned up or warning signage displayed.	Event Organiser

			<ul style="list-style-type: none"> - floor-standing warning signs to be made available for use where necessary. - electrical equipment is located near to sockets whilst ensuring cables or any other obstruction do not cross any walkways - report any accident or incident to a SENTINEL user or the Faculty Safety Team - post event location is safe, tidy and secure 	
Food allergies, poor food hygiene	sickness vomiting, upset stomach etc	Staff Students Visitors	<p>The Event Organiser must ensure that:</p> <ul style="list-style-type: none"> - only University approved suppliers are used for food provision - during briefing individuals should be made aware if any special provision has been made for people who may have food allergies - arrangements with catering services include the removal of cutlery pottery and food waste immediately after the event - ensure that food waste is placed in bin liners after the event ready for disposal 	Event Organiser
Electric shock from faulty electrical equipment	Electrical burns and electric shock	Staff Students	<p>Event organiser must ensure:</p> <ul style="list-style-type: none"> - any electrical equipment plugged 	Event Organiser

		Visitors	<p>into any of our electrical outlets is PA tested and in date.</p> <ul style="list-style-type: none"> - damaged or faulty equipment is immediately isolated and taken out of service. 	
Violence & anti social behaviour	personal injury or psychological damage	<p>Staff</p> <p>Students</p> <p>Visitors</p>	<p>The Event Organiser must ensure that:</p> <ul style="list-style-type: none"> - Numbers have been limited to defined occupancy levels (reception & meeting rooms) - participants are aware of contact details for security in the unlikely event that any such behaviour occurs (tel 32222) - events are immediately shut down if threat of intimidation or violence to others is evident from individuals or groups - Security Services are asked prior to event to be present or visit any event which may be disrupted by individuals or groups - lock down after event should be carried out with a minimum of 2 people and these should also leave the building in pairs 	Event Organiser
Safeguarding staff and vulnerable people	Child protection/vulnerable people guidelines contravened.	<p>Staff</p> <p>Students</p>	<p><input type="checkbox"/> Ensure that one-to-one contact with protected persons is kept to an absolute minimum and</p>	Event Organiser

			<p>that there is always another adult around.</p> <p><input type="checkbox"/> Contact with guests should remain within the event and arrangements should not be made to meet any protected person outside of the event. For example it is strongly advised that staff/student guides do not swap telephone numbers, email addresses or 'Facebook' or other social networking site information.</p> <p><input type="checkbox"/> Staff instructed to report any allegations or complaints of inappropriate behaviour, related or unrelated to the University to the events manager or a key member of staff.</p> <p><input type="checkbox"/> If staff foresee problems or find themselves in a difficult situation on the day contact Claire Savy Staff advised through briefing doc/meeting before the event</p>	
Car parking/Traffic Management	Cuts, bruises or broken bones Serious personal injury requiring hospitalisation	Staff Students Visitors	Visitors to take care when driving to and from the campus – maps available online before the event.	Event Organiser
Lost visitors	May get separated from group – more of a risk for young people	Visitors	<input type="checkbox"/> Extra temporary event signage in place and student volunteers for Leeds Festival of Science will be available to direct	Event Organiser

			visitors.	
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Occupational Health
Do Occupational Health need to be notified and involved in this activity? No
Occupational health details:
Date occupational health informed:
Occupational Health person informed: Not specified

Training
Is additional training required for this activity? No
Details of training required:

Supervision
Is supervision required when carrying out this activity? Yes
Detail the level of supervision required: Activity lead will supervise students undertaking activity

Related risk assessment IDs
Please record the ID numbers of any risk assessments that have been attached in the Related documents element of this form:

Communication of risk assessment findings to those involved			
METHOD	YES	DATE	COMMENTS
Local induction	No	Not specified	
Details or risk assessment discussed and agreed	Yes	Not specified	Event Organiser must agree arrangements in advance with all parties involved in preparation and execution of event.
Copy of risk assessment available	Yes	Not specified	Event Organiser must circulate assessment prior to the event to those involved in arrangements

Controls covered by local protocols & procedures	No	Not specified	
Safety Handbook location notified	No	Not specified	
Toolbox talk	Yes	Not specified	Event Organiser must ensure opening safety briefing to participants is conducted by a person with sufficient knowledge and authority.
Team meeting	No	Not specified	
Email circulation	No	Not specified	Event
Other	No	Not specified	

Review and sign off

Current status: Requires a review before: 26 February 2021

Date	User	Type
13 February 2019	Claire Savy	Review
13 February 2019	Claire Savy	Sign off
26 February 2020	Claire Savy	Review
26 February 2020	Claire Savy	Sign off

[Next Risk Assessment review date]

Actions and timescales

Related documents

Filename	Date uploaded
safeguarding_policy.pdf	13 February 2019

Related actions

No related actions