# University of Glasgow

## **Work Placement Risk Assessment Form**

College of Science & Engi	neering
School:	School of Engineering
Head of School:	Prof. John Marsh
Placement Supervisor:	Mr Douglas Irons
Trainee Details	
Name:	
Address:	
Age:School:	
Emergency Contact Name:	
Emergency Contact Number	er:
Section A- Description of	of Activities
The activities that will be carr	ied out by the trainee are as follows:-
The trainee will be carrying work pattern at the time of t	out some of the following activities depending on the particular he placement.
Mechanical Workshop (Re	oom 223 James Watt South Building)
1. Learn basic Computer Ai	ded Design (CAD)
2. Observe component man	ufacture on Computer Numerical Controlled (CNC) machines
3. Undertake a basic milling	gexercise
4. Undertake a basic filing e	exercise
5. Set up and operate a drilli	ing machine
6. Undertake a basic lathe to	urning exercise

7. Learn how to use measurement and inspection equipment

### University of Glasgow

#### **Work Placement Risk Assessment Form**

#### Section B – Hazards Associated with activities

The hazards that are listed below may be encountered in association with the activities detailed above. An explanation of the hazard and its method of control is given under each item indicated.

- 1. This is a computer based activity. No significant hazards
- 2. This activity involves shadowing an experienced technician in the operation of a CNC machine. Machines are fully enclosed with guards and interlocked to prevent exposure to moving parts. No significant hazards.
- 3. This activity involves machining metal components using rotating cutters, associated hazards are moving parts, possible metal projectiles and hot metal cuttings with sharp edges.
- 4. This activity involves use of a bench vice and hand tools, associated hazards are cuts and abrasions to hands.
- 5. This activity involves drilling holes using rotating drill bits, associated hazards are similar to 3. above.
- 6. This activity involves machining metal components using a centre lathe with a fixed tool and rotating work piece held in a chuck, associated hazards are similar to 3. above.
- 7. This activity involves use of measuring and inspection equipment by hand. No significant hazards.

There are times when heavy items are being handled or worked on in the workshop and this could potentially present a foot injury hazard if a heavy item were to drop or fall.

#### Section C – General precautions for protection of pupil from risk

The following general precautions will be taken to prevent the pupil suffering harm from hazards indicated.

- 3, 5 & 6 Work pieces are securely clamped in a machine vice or by other appropriate means. Machine or clamped on guards are used. Cutters and drill bits are checked for sharpness and sound condition. Safety glasses and a lab coat/ overalls are worn. Gloves are worn when handling sharp cuttings. Coolant or cutting oils are used thereby removing the heat from the work piece and the cuttings.
- 4. Work piece is securely held in appropriate bench vice. Files are fitted with handles.

Trolleys and lifting equipment is used and appropriate procedures are followed. The trainee will not be involved in such work but where appropriate safety shoes will be provided.

**Training:** Before embarking on any of the above activities the trainee will receive instructions and hazards and control measures will be explained by a qualified and experienced technician. Safe methods will be shown.

## **University of Glasgow**

## **Work Placement Risk Assessment Form**

Supervision: Whilst in the workshop the trainee will be under the general supervision of the Deputy Workshop Supervisor who may delegate the training and direct supervision to another available experienced technician. The trainee will be closely supervised at all times in the workshop.

**Protective Equipment**: Machine guards are provided and used as appropriate. A lab coat/overalls and safety glasses are provided and worn by all trainees. Safety shoes and gloves are provided as required.

Signature of Assessor: Date 17/5/11

Signature of Placement Supervisor: Date 23 5 11. (if different from Assessor)

Should you wish to discuss any aspect of this placement, please contact: Mr Douglas Irons Tel:  $0141\ 330\ 5251$