

Description of 4YP task or aspect being risk assessed here: <i>(Read the Guidance Notes before completing this form)</i>		4YP Project Number: 11410
PiCom: A Digital Communications Test Bed Based on Raspberry Pi – Use of Raspberry pi and wireless breadboard		
Site, Building & Room Number: Thom Building, Electronics Lab, 5 th Floor	Approx size of equipment/apparatus used or built (in metres): Height: ...0.03..... Width...0.08..... Length.....0.15.....	Photo provided? YES/NO
Assessment undertaken by: Cameron Eadie	Signed: <i>C Eadie</i>	Date: 02/11/17
Assessment Supervisor: Justin Coon	Signed: <i>Justin Coon</i>	Date: 2.11.17

Assessing the Risk*

You can do this for each hazard as follows:

- Consequences:** Decide how severe the outcome for each hazard would be if something went wrong (i.e. what are the Consequences?) Death would be "Severe", a minor cut to a finger could be regarded as "Insignificant".
- Likelihood:** How likely are these Consequences to actually happen? Highly likely? Remotely likely, or somewhere in between?
- Risk Rating:** Start at the left of the coloured Matrix. On your chosen Consequences row, read across until you are in the correct Likelihood column for the hazard in question. For example, an outcome with Severe consequences but with a Low probability of actually happening equates to a Medium risk overall. In this case "Medium" is what should be written in the Risk.

RISK MATRIX		LIKELIHOOD (or probability)			
		High	Medium	Low	Remote
CONSEQUENCES	Severe	High	High	Medium	Low
	Moderate	High	Medium	Medium/Low	Effectively Zero
	Insignificant	Medium/Low	Low	Low	Effectively Zero
	Negligible	Effectively Zero	Effectively Zero	Effectively Zero	Effectively Zero

Hazard (<i>potential for harm</i>)	Persons at Risk	Risk Controls In Place (<i>existing safety precautions</i>)	Risk*	Future Actions identified to Reduce Risks (<i>but not in place yet</i>)
Electrical shock from 3.3V powered I/O pins or open circuit board on the Raspberry Pi	Student using the Raspberry Pi	<ul style="list-style-type: none"> Use Raspberry Pi within its case whenever possible and avoid contact with I/O pins Remember to call GPIO.cleanup() function in python code to turn off any active I/O pins used by a program. Call this in the 'finally' section of a try-except block so that it always executes before program exit Do not connect I/O pins directly together – use resistors to prevent potential short circuit Subject power supply of Raspberry Pi to Portable Appliance Test (PAT) at regular intervals 	Low	

Hazard <i>(potential for harm)</i>	Persons at Risk	Risk Controls In Place <i>(existing safety precautions)</i>	Risk*	Future Actions identified to Reduce Risks <i>(but not in place yet)</i>
Electrical shock constructing and prototyping electronics on wireless breadboard	Student prototyping electronics to connect to Raspberry Pi	<ul style="list-style-type: none"> • Never build or rearrange electronics on wireless breadboard while Raspberry Pi is powered and I/O pins are connected to the board • Ensure that both Pi's are grounded together • Don't touch electronics while I/O pin connections are active 	Low	

