


GENERAL RISK ASSESSMENT TEMPLATE



Work area / operation	Dobot Magician (aka. Brobot)	Assessors name	Sanjid Mahmood Hamim, Omar Malek			
Assessors' Signature:	 Omar Malek				Date	19/10/2019

ACTIVITY	ASSOCIATED HAZARDS	INHERENT RISK	CONTROL MEASURES	TARGET DATE	RESIDUAL RISK LEVEL
Electrical Short Circuit	Electrical components, like the motors at each joint, may malfunction.	A malfunctioning electrical component might electrocute the user and also the by-standers.	Physical contact with the required gear and only authorized personnel is allowed.	20/10/2019	5
Mid-operation handling of the Dobot	Dobot operates autonomously according to given specifications, thus mainly unaware of the environment. Having various end-effector, sometimes with sharp edges, is a hazard.	Sharp and automated end-effector and the moving metal body of the robot may result in physical injuries that involve cuts and bruises.	Any experiment on the robot will be conducted from a safe distance. And simulation will also be double-checked by the supervisor before implementing on the Dobot.	20/10/2019	6
Using 3D Printing Module	Heating rod heats up to 250°C.	Physical contact with the heating rod may result into severe skin burns.	3D printing module will not be used on this project. If used, operation of the Dobot will be conducted inside a safety cage.	Not Planned	3
Using Laser Module of the Dobot Magician	Eye or skin are exposed to direct radiation while using Laser Module.	Direct Radiation can result in temporary blindness.	This feature is not intended to be used. Though wearing safety goggles and operating from a safe distance if the module is used will mitigate the problem.	Not Planned	4

Supervisor approval of assessment		I am satisfied that the residual risk with existing controls is acceptable <input type="checkbox"/> Yes <input type="checkbox"/> No			
		OR I am satisfied that that the proposed controls will reduce risk to an acceptable level. <input type="checkbox"/> Yes <input type="checkbox"/> No			
Supervisors Name	Gavin Paul	Signature		Date	