
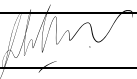


HIRARC FORM

Faculty/School/Unit/Laboratory/Workshop:	Malaysia-Japan International Institute of Technology (MJIT)	Conducted by: (Name, Designation, Signature)	Lim Ming Jun (Student) 		
Work Process:	Final Year Project (FYP) 2023	Conducted Date:	From: 9 October 2023	Until: 28 July 2024	
Location/Block:	Bio-1st Lab, Ivl7 MJIT	Reviewed by: (Name, Designation, Signature)			
Approved by: (Name, Designation, Signature)	AP. Dr. Shahrum Shah bin Abdullah (FYP Supervisor) 	Review Date:			
Approval Date :	31.10.2023	Next Review Date:			

1. HAZARD IDENTIFICATION				2. RISK ANALYSIS					3. RISK CONTROL	
No.	Activities (Routine / Non-Routine)	Actual and Potential Hazards	Which can Cause Potential Consequences / Risk Effects	Existing Control Measures	Likelihood (A)	Severity (B)	Risk Level (A) x (B)	Legal & Other Requiremen ts	Additional / Recommended Control Measures	Person In Charge (Due Date / Status)
1	Working in student room	Old electrical equipments	Power leakage	Ensure connection is done properly	1	3	3	L5	Replace with new equipments	
2	Research / Programming	Long time in front of computer	Musculoskeletal Disorder	Proper Sitting Posture	4	1	4	L1	Ergonomics Training	
3	Building Electronics Hardware	Short circuiting	Burn or low voltage electrocution	Wear Insulating Gloves	3	1	3	L1	Read Datasheets Carefully	
4	Quadcopter Testing	Lost controlled quadcopter	Injury to body and eyes	Wear Safety Goggles and lab coat	4	3	12	L1	Limit degree of freedom of quadcopter	
5										
6										
7										

Likelihood (A)

- 5 - Most Likely (The most likely result of the hazard / event being realized)
- 4 - Possible (Has a good chance of occurring and is not unusual)
- 3 - Conceivable (Might be occur at sometime in future)
- 2 - Remote (Has not been known to occur after many years)
- 1 - Inconceivable (Is practically impossible and has never occurred)

Severity (B)

- 5 - Catastrophic (Numerous fatalities, irrecoverable property damage and productivity)
- 4 - Fatal (Approximately one single fatality major property damage if hazard is realized)
- 3 - Serious (Non-fatal injury, permanent disability)
- 2 - Minor (Disabling but not permanent injury)
- 1 - Negligible (Minor abrasions, bruises, cuts, first aid type injury)

Hierarchy of Control

- 1 - Elimination
- 2 - Substitution
- 3 - Isolation
- 4 - Engineering Control
- 5 - Administration Control
- 6 - Personal Protective Equipment (PPE)

Risk Level

1-4 (Low)
5-12 (Medium)
15-25 (High)

Legal & Other Requirements

- L1 - Occupational Safety and Health Act 1994 (Act 514)
- L2 - Factories and Machinery Act 1967 (Act 139)
- L3 - Atomic Energy Licensing Act 1984 (Act 304)
- L4 - Biosafety Act 2007 (Act 678)
- L5 - Electricity Supply Act 1990 (Act 447)
- L6 - Fire Service Act 1988 (Act 341)
- L7 - Others Act & Regulation (Specify)
- L8 - NIL (Not In List)