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Inventory of Work Activities			
Reference Number: (please refer to PRS RA Repository for next running number)		**Division**	Infocomm Technology
Title	Lab Session		

Ref	Location	Process	Work Activity	Remarks
1	ES Lab 1	Setting up the Tech Laboratory	Installing laboratory equipment	
			Setting up the electrical wiring	
			Implementing fire safety measures	
2	ES Lab 2	Ensuring Safety of the Laboratory	Conducting routine inspection of lab equipment	
			Implementing comprehensive safety training for lab personnel	
			Ensuring proper storage and handling of hazardous substances	

Note:
1. This form is to be completed before filling in the Risk Assessment Form.
2. The contents of the Process (column) and Work Activity (column) in the Inventory of Work Activities Form are to be copied over to the Process (row) and Work Activity (column), respectively, in the Risk Assessment Form.

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RISK ASSESSMENT						
Reference Number				RA Leader:		Approved by:	
Title:	Lab Session			RA Team:		Signature:	
Division:	Infocomm Technology	Location:	ES Lab 1, ES Lab 2			Designation:	
Last Review Date:	31 Aug 2025	Next Review Date:	31 Aug 2028			Date	

	Hazard Identification			Risk Evaluation				Risk Control						
Ref	Activity	Hazard	Possible injury / ill-health	Existing risk controls	S	L	RPN	Additional controls	S	L	RPN	Implementation Person	Due date	Remarks
Setting up the Tech Laboratory														
1.1	Installing laboratory equipment	Electrical equipment exploding/ catching fire	a) Electrical burns b) cuts	a) Ensure around equipment is not cluttered to allow for ventilation b) Avoid overloading of electrical sockets b) Engineering Controls -	4	2	8		4					

Likelihood / Severity	Rare (1)	Remote (2)	Occasional (3)	Frequent (4)	Almost Certain (5)
Catastrophic (5)	5 (M)	10 (M)	15 (H)	20 (H)	25 (H)
Major (4)	4 (M)	8 (M)	12 (M)	16 (H)	20 (H)
Moderate (3)	3 (L)	6 (M)	9 (M)	12 (M)	15 (H)
Minor (2)	2 (L)	4 (M)	6 (M)	8 (M)	10 (M)
Negligible (1)	1 (L)	2 (L)	3 (L)	4 (M)	(M)

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	Hazard Identification			Risk Evaluation				Risk Control						
Ref	Activity	Hazard	Possible injury / ill-health	Existing risk controls	S	L	RPN	Additional controls	S	L	RPN	Implementation Person	Due date	Remarks
				use plugs with built-in circuit breaker										
1.2	Installing laboratory equipment	Back strain from carrying heavy items	a) Back/ligament strain b) spinal cord injury	a) Administrative Controls - Adopt proper lifting technique (carry with back straight and squat down to lift heavy objects	3	2	6		3					
1.3	Setting up the electrical wiring	Electrical equipment exploding/ catching fire	a) Electrical burns b) cuts	a) Ensure around equipment is not cluttered to allow for ventilation b) Avoid overloading of electrical sockets c) Avoid placing water near or on the workstation of the AV system to prevent accidental spillage	4	2	8		4					
1.4	Implementing fire safety measures	Improper handling and	a) Chemical burns b) skin irritation	a) Administrative Controls - Implement proper training	3	2	6		3					

Likelihood / Severity	Rare (1)	Remote (2)	Occasional (3)	Frequent (4)	Almost Certain (5)
Catastrophic (5)	5 (M)	10 (M)	15 (H)	20 (H)	25 (H)
Major (4)	4 (M)	8 (M)	12 (M)	16 (H)	20 (H)
Moderate (3)	3 (L)	6 (M)	9 (M)	12 (M)	15 (H)
Minor (2)	2 (L)	4 (M)	6 (M)	8 (M)	10 (M)
Negligible (1)	1 (L)	2 (L)	3 (L)	4 (M)	(M)

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	Hazard Identification			Risk Evaluation				Risk Control						
Ref	Activity	Hazard	Possible injury / ill-health	Existing risk controls	S	L	RPN	Additional controls	S	L	RPN	Implementation Person	Due date	Remarks
		use of fire extinguishing materials and chemicals.	c) eye damage d) and inhalation of chemical fumes.	on handling and use of fire extinguishing materials, ensure proper ventilation, and provide first aid kits at accessible locations. b) Personal Protective Equipment (PPE) - encourage wearing appropriate personal protective equipment (PPE),										
1.5	Implementing fire safety measures	Risk of burns or injury from fire if safety measures are not implemented correctly.	a) Burns b) smoke inhalation c) thermal injuries.	a) Administrative Controls - Implement fire safety measures like installing adequate fire extinguishers, smoke detectors, fire curtains and provide fire safety training.	5	2	10		5					

Likelihood / Severity	Rare (1)	Remote (2)	Occasional (3)	Frequent (4)	Almost Certain (5)
Catastrophic (5)	5 (M)	10 (M)	15 (H)	20 (H)	25 (H)
Major (4)	4 (M)	8 (M)	12 (M)	16 (H)	20 (H)
Moderate (3)	3 (L)	6 (M)	9 (M)	12 (M)	15 (H)
Minor (2)	2 (L)	4 (M)	6 (M)	8 (M)	10 (M)
Negligible (1)	1 (L)	2 (L)	3 (L)	4 (M)	(M)

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	Hazard Identification			Risk Evaluation				Risk Control						
Ref	Activity	Hazard	Possible injury / ill-health	Existing risk controls	S	L	RPN	Additional controls	S	L	RPN	Implementation Person	Due date	Remarks
1.6	Implementing fire safety measures	Risks associated with the procedures of installing fire prevention equipment.	a) Falls b) crushing injuries c) equipment malfunction leading to injuries.	a) Administrative Controls - Use of proper tools for installation, maintenance checks, worker training for equipment usage.	4	3	12		4					
1.7	Implementing fire safety measures	Potential electrical hazards while inspecting and testing fire safety equipment that interlinks with	a) Electrical shocks b) electrical burns c) electrocution.	a) Administrative Controls - Regular inspection and maintenance of electrical equipment, use of insulated tools and gloves, and shut off the power while servicing.	4	2	8		4					

Likelihood / Severity	Rare (1)	Remote (2)	Occasional (3)	Frequent (4)	Almost Certain (5)
Catastrophic (5)	5 (M)	10 (M)	15 (H)	20 (H)	25 (H)
Major (4)	4 (M)	8 (M)	12 (M)	16 (H)	20 (H)
Moderate (3)	3 (L)	6 (M)	9 (M)	12 (M)	15 (H)
Minor (2)	2 (L)	4 (M)	6 (M)	8 (M)	10 (M)
Negligible (1)	1 (L)	2 (L)	3 (L)	4 (M)	(M)

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	Hazard Identification			Risk Evaluation				Risk Control						
Ref	Activity	Hazard	Possible injury / ill-health	Existing risk controls	S	L	RPN	Additional controls	S	L	RPN	Implementation Person	Due date	Remarks
		electrical components.												
Ensuring Safety of the Laboratory														
2.1	Conducting routine inspection of lab equipment	Biological – Transmission of infectious disease from Symptomatic / Asymptomatic Users.	a) Infectious disease (Covid- 19 b) SARS c) etc)	a) Administrative Controls - 1) All presenting with temperature ?37.5oC and/or exhibiting respiratory symptoms (e.g. cough, sore throat, runny nose, anosmia) shall be asked to leave the premise and seek medical attention immediately. 2) All to ensure the use of lab equipment /machineries comply to the safe distancing measures (if present) and infection control measures. 3) All to	2	1	2		2						

Likelihood / Severity	Rare (1)	Remote (2)	Occasional (3)	Frequent (4)	Almost Certain (5)
Catastrophic (5)	5 (M)	10 (M)	15 (H)	20 (H)	25 (H)
Major (4)	4 (M)	8 (M)	12 (M)	16 (H)	20 (H)
Moderate (3)	3 (L)	6 (M)	9 (M)	12 (M)	15 (H)
Minor (2)	2 (L)	4 (M)	6 (M)	8 (M)	10 (M)
Negligible (1)	1 (L)	2 (L)	3 (L)	4 (M)	(M)

	Hazard Identification			Risk Evaluation				Risk Control						
Ref	Activity	Hazard	Possible injury / ill-health	Existing risk controls	S	L	RPN	Additional controls	S	L	RPN	Implementation Person	Due date	Remarks
				ensure supplies (tissues, alcohol-based wet wipes, alcohol- based hand rub and trash bin) are adequate readily accessible in the lab to promote compliance to hand hygiene and lab equipment disinfection. Sufficient alcohol- based hand rubs shall be made available for use during HSS practical sessions (1 bottle placed per lab). 4) Staff shall adhere to maximum number of attendees stated in the directive from the institution. 5) Academic staff or Technical Officer will be present									

Likelihood / Severity	Rare (1)	Remote (2)	Occasional (3)	Frequent (4)	Almost Certain (5)
Catastrophic (5)	5 (M)	10 (M)	15 (H)	20 (H)	25 (H)
Major (4)	4 (M)	8 (M)	12 (M)	16 (H)	20 (H)
Moderate (3)	3 (L)	6 (M)	9 (M)	12 (M)	15 (H)
Minor (2)	2 (L)	4 (M)	6 (M)	8 (M)	10 (M)
Negligible (1)	1 (L)	2 (L)	3 (L)	4 (M)	(M)

	Hazard Identification			Risk Evaluation				Risk Control						
Ref	Activity	Hazard	Possible injury / ill-health	Existing risk controls	S	L	RPN	Additional controls	S	L	RPN	Implementation Person	Due date	Remarks
				during the all practical sessions. No unsupervised usage by students										
2.2.1	Conducting routine inspection of lab equipment	Physical – Manual	Musculoskeletal injuries such as strains and	a) Administrative Controls - 1) All shall carry heavy load with the proper lifting technique. 2) Additional users shall be deployed if load requires >1 person to move. 3) Trolley shall be used whenever necessary to move heavy load.	2	3	6		2					
2.2.2		handling of heavy load (eg.	sprains	a) Administrative Controls - 1) All shall carry heavy load with the proper lifting technique. 2) Additional users shall be deployed if load requires >1 person to move. 3) Trolley shall be	2	3	6		2					

Likelihood / Severity	Rare (1)	Remote (2)	Occasional (3)	Frequent (4)	Almost Certain (5)
Catastrophic (5)	5 (M)	10 (M)	15 (H)	20 (H)	25 (H)
Major (4)	4 (M)	8 (M)	12 (M)	16 (H)	20 (H)
Moderate (3)	3 (L)	6 (M)	9 (M)	12 (M)	15 (H)
Minor (2)	2 (L)	4 (M)	6 (M)	8 (M)	10 (M)
Negligible (1)	1 (L)	2 (L)	3 (L)	4 (M)	(M)

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	Hazard Identification			Risk Evaluation				Risk Control						
Ref	Activity	Hazard	Possible injury / ill-health	Existing risk controls	S	L	RPN	Additional controls	S	L	RPN	Implementation Person	Due date	Remarks
				used whenever necessary to move heavy load.										
2.2.3		Phantom)		a) Administrative Controls - 1) All shall carry heavy load with the proper lifting technique. 2) Additional users shall be deployed if load requires >1 person to move. 3) Trolley shall be used whenever necessary to move heavy load.	2	3	6		2					
2.3	Conducting routine inspection of lab equipment	Physical – Trip and fall	a) Bruises b) sprains and cuts	a) Administrative Controls - 1) All shall ensure that loose wiring are properly kept before moving equipment. 2) All shall wear covered shoes, long pants 3) All shall ensure that loose wiring are	2	2	4		2					

Likelihood / Severity	Rare (1)	Remote (2)	Occasional (3)	Frequent (4)	Almost Certain (5)
Catastrophic (5)	5 (M)	10 (M)	15 (H)	20 (H)	25 (H)
Major (4)	4 (M)	8 (M)	12 (M)	16 (H)	20 (H)
Moderate (3)	3 (L)	6 (M)	9 (M)	12 (M)	15 (H)
Minor (2)	2 (L)	4 (M)	6 (M)	8 (M)	10 (M)
Negligible (1)	1 (L)	2 (L)	3 (L)	4 (M)	(M)

	Hazard Identification			Risk Evaluation				Risk Control						
Ref	Activity	Hazard	Possible injury / ill-health	Existing risk controls	S	L	RPN	Additional controls	S	L	RPN	Implementation Person	Due date	Remarks
				properly kept after setting up of equipment. 4) All shall perform an inspection on the nearby vicinity to ensure there are no protrusion or loose wiring.										
2.4	Implementing comprehensive safety training for lab personnel	Biological – Transmission of infectious disease from Symptomatic / Asymptomatic Users.	a) Infectious disease (Covid- 19 b) SARS c) etc)	a) Administrative Controls - 1) All presenting with temperature ?37.5oC and/or exhibiting respiratory symptoms (e.g. cough, sore throat, runny nose, anosmia) shall be asked to leave the premise and seek medical attention immediately. 2) All to ensure the use of lab equipment /machineries comply to the safe	2	1	2		2						

Likelihood / Severity	Rare (1)	Remote (2)	Occasional (3)	Frequent (4)	Almost Certain (5)
Catastrophic (5)	5 (M)	10 (M)	15 (H)	20 (H)	25 (H)
Major (4)	4 (M)	8 (M)	12 (M)	16 (H)	20 (H)
Moderate (3)	3 (L)	6 (M)	9 (M)	12 (M)	15 (H)
Minor (2)	2 (L)	4 (M)	6 (M)	8 (M)	10 (M)
Negligible (1)	1 (L)	2 (L)	3 (L)	4 (M)	(M)

	Hazard Identification			Risk Evaluation				Risk Control						
Ref	Activity	Hazard	Possible injury / ill-health	Existing risk controls	S	L	RPN	Additional controls	S	L	RPN	Implementation Person	Due date	Remarks
				distancing measures (if present) and infection control measures. 3) All to ensure supplies (tissues, alcohol-based wet wipes, alcohol- based hand rub and trash bin) are adequate readily accessible in the lab to promote compliance to hand hygiene and lab equipment disinfection. Sufficient alcohol- based hand rubs shall be made available for use during HSS practical sessions (1 bottle placed per lab). 4) Staff shall adhere to maximum number of attendees stated in the directive from										

Likelihood / Severity	Rare (1)	Remote (2)	Occasional (3)	Frequent (4)	Almost Certain (5)
Catastrophic (5)	5 (M)	10 (M)	15 (H)	20 (H)	25 (H)
Major (4)	4 (M)	8 (M)	12 (M)	16 (H)	20 (H)
Moderate (3)	3 (L)	6 (M)	9 (M)	12 (M)	15 (H)
Minor (2)	2 (L)	4 (M)	6 (M)	8 (M)	10 (M)
Negligible (1)	1 (L)	2 (L)	3 (L)	4 (M)	(M)

	Hazard Identification			Risk Evaluation				Risk Control						
Ref	Activity	Hazard	Possible injury / ill-health	Existing risk controls	S	L	RPN	Additional controls	S	L	RPN	Implementation Person	Due date	Remarks
				the institution. 5) Academic staff or Technical Officer will be present during the all practical sessions. No unsupervised usage by students										
2.5.1	Implementing comprehensive safety training for lab personnel	Physical – Manual	Musculoskeletal injuries such as strains and	a) Administrative Controls - 1) All shall carry heavy load with the proper lifting technique. 2) Additional users shall be deployed if load requires >1 person to move. 3) Trolley shall be used whenever necessary to move heavy load.	2	3	6		2					
2.5.2		handling of heavy load (eg.	sprains	a) Administrative Controls - 1) All shall carry heavy load with the proper lifting technique. 2) Additional	2	3	6		2					

Likelihood / Severity	Rare (1)	Remote (2)	Occasional (3)	Frequent (4)	Almost Certain (5)
Catastrophic (5)	5 (M)	10 (M)	15 (H)	20 (H)	25 (H)
Major (4)	4 (M)	8 (M)	12 (M)	16 (H)	20 (H)
Moderate (3)	3 (L)	6 (M)	9 (M)	12 (M)	15 (H)
Minor (2)	2 (L)	4 (M)	6 (M)	8 (M)	10 (M)
Negligible (1)	1 (L)	2 (L)	3 (L)	4 (M)	(M)

	Hazard Identification			Risk Evaluation				Risk Control						
Ref	Activity	Hazard	Possible injury / ill-health	Existing risk controls	S	L	RPN	Additional controls	S	L	RPN	Implementation Person	Due date	Remarks
				users shall be deployed if load requires >1 person to move. 3) Trolley shall be used whenever necessary to move heavy load.										
2.5.3		Phantom)		a) Administrative Controls - 1) All shall carry heavy load with the proper lifting technique. 2) Additional users shall be deployed if load requires >1 person to move. 3) Trolley shall be used whenever necessary to move heavy load.	2	3	6		2					
2.6	Implementing comprehensive safety training for lab personnel	Physical – Trip and fall	a) Bruises b) sprains and cuts	a) Administrative Controls - 1) All shall ensure that loose wiring are properly kept before moving equipment. 3) All shall	2	2	4		2					

Likelihood / Severity	Rare (1)	Remote (2)	Occasional (3)	Frequent (4)	Almost Certain (5)
Catastrophic (5)	5 (M)	10 (M)	15 (H)	20 (H)	25 (H)
Major (4)	4 (M)	8 (M)	12 (M)	16 (H)	20 (H)
Moderate (3)	3 (L)	6 (M)	9 (M)	12 (M)	15 (H)
Minor (2)	2 (L)	4 (M)	6 (M)	8 (M)	10 (M)
Negligible (1)	1 (L)	2 (L)	3 (L)	4 (M)	(M)

	Hazard Identification			Risk Evaluation				Risk Control						
Ref	Activity	Hazard	Possible injury / ill-health	Existing risk controls	S	L	RPN	Additional controls	S	L	RPN	Implementation Person	Due date	Remarks
				ensure that loose wiring are properly kept after setting up of equipment. 4) All shall perform an inspection on the nearby vicinity to ensure there are no protrusion or loose wiring. b) Personal Protective Equipment (PPE) - 2) All shall wear covered shoes, long pants										
2.7	Ensuring proper storage and handling of hazardous substances	Contact with irritant waste powder	Skin and eye irritation	a) Personal Protective Equipment (PPE) - a)Wear nitrile gloves when disposing chemical solutions.	2	2	4		2					

Likelihood / Severity	Rare (1)	Remote (2)	Occasional (3)	Frequent (4)	Almost Certain (5)
Catastrophic (5)	5 (M)	10 (M)	15 (H)	20 (H)	25 (H)
Major (4)	4 (M)	8 (M)	12 (M)	16 (H)	20 (H)
Moderate (3)	3 (L)	6 (M)	9 (M)	12 (M)	15 (H)
Minor (2)	2 (L)	4 (M)	6 (M)	8 (M)	10 (M)
Negligible (1)	1 (L)	2 (L)	3 (L)	4 (M)	(M)

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	Hazard Identification			Risk Evaluation				Risk Control						
Ref	Activity	Hazard	Possible injury / ill-health	Existing risk controls	S	L	RPN	Additional controls	S	L	RPN	Implementation Person	Due date	Remarks
2.8	Ensuring proper storage and handling of hazardous substances	Contact with broken glass	Cuts	a) "Broken Glass"" waste bin is provided for broken glass disposal. b) Cut resistant gloves are provided to handle big broken glass pieces"	2	2	4		2					

Likelihood / Severity	Rare (1)	Remote (2)	Occasional (3)	Frequent (4)	Almost Certain (5)
Catastrophic (5)	5 (M)	10 (M)	15 (H)	20 (H)	25 (H)
Major (4)	4 (M)	8 (M)	12 (M)	16 (H)	20 (H)
Moderate (3)	3 (L)	6 (M)	9 (M)	12 (M)	15 (H)
Minor (2)	2 (L)	4 (M)	6 (M)	8 (M)	10 (M)
Negligible (1)	1 (L)	2 (L)	3 (L)	4 (M)	(M)

Level	Severity	Description
1	Negligible	Negligible injury.
2	Minor	Injury or ill-health requiring first-aid only (includes minor cuts and bruises, irritation, ill-health with temporary discomfort, fatigue, mental well-being).
3	Moderate	Injury or ill-health (including mental well-being) requiring medical treatment (includes lacerations, burns, sprains, minor fractures, psychosocial stress, dermatitis and work-related upper limb disorders).
4	Major	Serious injuries or life-threatening occupational diseases (includes amputations, major fractures, multiple injuries, occupational cancers, acute poisoning, diagnosed mental illnesses, disabilities and deafness).
5	Catastrophic	Fatality, fatal diseases or multiple major injuries.

Level	Likelihood	Description
1	Rare	Not expected to occur but still possible.
2	Remote	Not likely to occur under normal circumstances.
3	Occasional	Possible or known to occur.
4	Frequent	Common occurrence.
5	Almost certain	Continual or repeating experience.

Risk score	Acceptability of risk	Recommended actions
Low 1-3	Acceptable	No additional risk control measures may be needed. Frequent review and monitoring of hazards are required to ensure that the risk level assigned is accurate and does not increase over time.
Medium 4-12	Tolerable	A careful evaluation of the hazards should be carried out to ensure that the risk level is reduced to as low as reasonably practicable (ALARP) within a defined time period. Interim risk control measures, such as administrative controls, may be implemented while long term measures are being established. Management attention is required.
High 15-25	Not acceptable	High Risk level must be reduced to at least Medium Risk before work commences. There should not be any interim risk control measures and risk control measures should not be overly dependent on personal protective equipment. If practicable, the hazard should be eliminated before work commences. Management review is required before work commences.

Note:

1. For the Role and Responsibilities of the Approver and RA Leader please refer to sections 4.3 and 4.4 of the Risk Management Programme respectively.