

## RISK ASSESSMENT

Unit/Institute:	Department of Mechanical and Industrial Engineering	Date:	30.jan
Responsible line manager (name):	Martin Steinert	Revised:	27.june
Responsible for activities being risk assessed (name):	Oliver Istad Funch, Robert Marhaug		
Participants in the risk assement (names):	Oliver Istad Funch, Robert Marhaug		

Description of the activity, process, area, etc.:
This risk assessment applies to a master's thesis in mechanical engineering at the department of mechanical and industrial engineering.

Activity / process	Unwanted incident	Existing risk reducing measures	Probability (P)	Consequence (C) Evaluate the categories individualley. <i>Health should always be evaluated.</i>				Risk value (P x C)	Risk reducing measures - suggestions Measures reducing the probability of the unwanted incident happening should be prioritized.	Residual risk after measures being implemented (S x K)
			(1-5)	Health (1-5)	Material values (1-5)	Environment (1-5)	Reputation (1-5)			
Trash handling	Cut injury	Safety gloves	3	2				6	Careful and attentive handling	2 (P = 1)
Trash handling	Hazardous materials/chemicals	Safety gloves, eye protection	2	2				4	Careful and attentive handling	2 (P = 1)
Trash handling	Inproper disposal	Recycling stations	3			1		3	Correct disposal	1 (P = 1)
Use of laser cutter	Crush injury	Training	2	2				4	Training in use of machinery	2 (P = 1)
Use of laser cutter	Fire and fire inflicted injury	Available fire extinguishers	2	3				6	Training in use of machinery	3 (P = 1)
Use of 3D printer	Fire and fire inflicted injury	Available fire extinguishers	2	3				6	Proper overwatch	3 (P = 1)
Use of 3D printer	Burn injury from heatbed and nozzle	Limited access to 3D printers	2	2				4	Use gloves in contact with hot parts	2 (P = 1)
Use of 3D printer	Inhalation of toxic gasses	Proper ventilation	2	3				6	Ensure materials used are non toxic	3 (P = 1)
Use of 3D printer	Misuse of printer	Operation manual available	3		2			6	Training in use of machinery	2 (P = 1)
Use of cutting tools	Cut injury	Protective gear	2	2				4	Training in use of equipment	2 (P = 1)
Use of carpentry tools	Cut injury	Protective gear	2	2				4	Training in use of equipment	2 (P = 1)
Use of carpentry tools	Impact injury	Protective gear	2	2				4	Training in use of equipment	2 (P = 1)
Use of adhesives	Eye injury	Eye protection	2	2				4	Careful application of adhesives	2 (P = 1)
Use of adhesives	Allergic reaction from skin contact	Proper clothing	2	3				6	Careful application of adhesives	3 (P = 1)
Use of adhesives	Inhalation of toxic gases	Gas mask	3	3				9	Careful application of adhesives	3 (P = 1)
Use of adhesives	Spillage	Properly sealed containers	3		2			6	Careful application of adhesives	2 (P = 1)
Lab work	Unwanted insident inflicted by other people	Lab guidelines	3	2				6	Alertness of other peoples activities	2 (P = 1)
Loud sound from experiment operation	Hearing loss	Protective gear	3	3				9	Use hearing protection during operation	3 (P = 1)