TSSM™
Creating VCE Success

Product Design and Technology
Teach Yourself Series
Topic 12 of 13: Risk Management
(Units 1 to 4)

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Contents

Risk Management

As it appears in Unit 1-4

UNIT	Description
1	Key Knowledge Outcome 1 • *the role of scheduled production plans:* - *risk management for safe, efficient and accurate production of a product* Key Knowledge Outcome 2 • *Risk management for safe, accurate and efficient application of production processes using materials, tools, equipment and machines*
2	Key Knowledge Outcome 1 • *the role of scheduled production plans:* - *risk management for safe, efficient and accurate production of a product* Key skills Outcome 2 • *use risk management strategies and safely use materials, tools, equipment and machines*
3	Key Knowledge Outcome 2 • *the role and components of production planning:* – *a risk assessment*
4	Key Knowledge Outcome 2 • *risk management associated with selecting and using tools, equipment, machinery, materials, chemicals and other substances* Key Skills Outcome 2 • *apply risk management throughout production* • *use tools, equipment and machines, and materials competently and safely* • *use appropriate processes safely and accurately*

Victorian Curriculum and Assessment Authority. (2017) *Victorian Certificate of Education Product Design and Technology study design,* pp.14-15,18-19, 22. 28. Melbourne, Victorian Curriculum and Assessment Authority.

Information

This is an extremely important part of the study and requires students to consider the safety of themselves and others. In each unit of study, risk management is a component of the production planning. Students are also required to conduct risk assessments for process and material test, which could occur during research. The risk assessment must include four parts.

HAZARD IDENTIFICATION: identify all hazards associated with any practical activity. This may include physical, chemical, biological, psychological, ergonomics and mechanical.

ASSESSMENT OF RISK: The following table is used to assess the level of risk. It compares likelihood against severity of injury.

		Consequences				
		Insignificant (1) No injuries / minimal financial loss	**Minor (2)** First aid treatment / medium financial loss	**Moderate (3)** Medical treatment / high financial loss	**Major (4)** Hospitable / large financial loss	**Catastrophic (5)** Death / massive financial loss
Likelihood	**Almost Certain (5)** Often occurs / once a week	Moderate (5)	High (10)	High (15)	Catastrophic (20)	Catastrophic (25)
	Likely (4) Could easily happen / once a month	Moderate (4)	Moderate (8)	High (12)	Catastrophic (16)	Catastrophic (20)
	Possible (3) Could happen or known it to happen / once a year	Low (3)	Moderate (6)	Moderate (9)	High (12)	High (15)
	Unlikely (2) Hasn't happened yet but could / once every 10 years	Low (2)	Moderate (4)	Moderate (6)	Moderate (8)	High (10)
	Rare (1) Conceivable but only on extreme circumstances / once in 100 years	Low (1)	Low (2)	Low (3)	Moderate (4)	Moderate (5)

IMPLEMENTATION OF CONTROLS: This requires you to develop a set of controls to reduce the hazards. This is carried out using the hierarchy of controls. In order; Eliminate, substitute, isolate, engineering, administration and personal protective equipment.

CHECKING OF CONTROLS: Throughout production you are require to regulary check the controls, ensuring the hazard is controlled. If not reassessing the hazard and the controls is required.