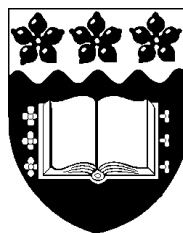


# **School Of Electrical, Computer & Telecommunications Engineering UOW**

## **How to Fill In a Risk Assessment Form**

### **Procedures**



**Version: 1.1**



**Document Owner:** Laboratory Manager, SECTE

**Author:** Sasha Nikolic

### Document Control:

| Version | Date     | Author        | Reason  |
|---------|----------|---------------|---|
| 1.0     | 28/02/08 | Sasha Nikolic | Initial Document                                |
| 1.1     | 06/03/09 | Sasha Nikolic | Added diagrams and increased instruction detail |



## Table of Contents

|                    |   |
|--------------------|---|
| INTRODUCTION ..... | 4 |
| THE PROCESS .....  | 4 |
| EXAMPLE .....      | 7 |



## Introduction

As part of the Schools OH&S policy students that undertake projects must complete a Project Form and a Risk Assessment Form. This document explains how students fill in the Risk Assessment form. It is important to note that any project should have at least a couple of items as part of their risk assessment. The form is available from the SECTE website.

## The Process

### Hazard Identification

To commence the risk assessment process the student must already know what their project is and what is required from them. This information is expressed in the Project Form.

When completing the Project Form the student needs to consider what hazards are possible in relation to the project. Use the Risk Assessment Form to record the risks. The Risk Assessment form lists a number of hazards that the student needs to compare against their project. The list of items is below:

| What is a hazard?   |  |
|---|--|
| <p><b>A Could people be injured or made sick by things such as:</b></p> <ul style="list-style-type: none"> <li>Noise</li> <li>Light</li> <li>Radiation</li> <li>Toxicity</li> <li>Infection</li> <li>High or low temperatures</li> <li>Electricity</li> <li>Moving or falling things (or people)</li> <li>Flammable or explosive materials</li> <li>Things under tension or pressure (compressed gas or liquid; springs)</li> <li>Any other energy sources or stresses</li> <li>Biohazardous material</li> <li>Laser</li> </ul>   | <p><b>B What could go wrong?</b></p> <ul style="list-style-type: none"> <li>What if equipment is misused?</li> <li>What might people do that they shouldn't</li> <li>How could someone be killed?</li> <li>How could people be injured?</li> <li>What may make people ill?</li> <li>Are there any special emergency procedures required?</li> </ul>  |
| <p><b>C Can workplace practices cause injury or sickness?</b></p> <ul style="list-style-type: none"> <li>Are there heavy or awkward lifting jobs?</li> <li>Can people work in a comfortable posture?</li> <li>If the work is repetitive, can people take breaks?</li> <li>Are people properly trained?</li> <li>Do people follow correct work practices?</li> <li>Are there adequate facilities for the work being performed?</li> <li>Are universal safety precautions for biohazards followed?</li> <li>Is there poor housekeeping? Look out for clutter</li> <li>Torn or slippery flooring</li> <li>Sharp objects sticking out</li> <li>Obstacles</li> </ul> | <p><b>D How might these injuries happen to people?</b></p> <ul style="list-style-type: none"> <li>Broken bones</li> <li>Eye damage</li> <li>Hearing problems</li> <li>Strains or sprains</li> <li>Cuts or abrasions</li> <li>Bruises</li> <li>Burns</li> <li>Lung problems including inhalation injury/ infection</li> <li>Skin contact</li> <li>Poisoning</li> <li>Needle-stick injury</li> </ul> |
| <p><b>E Imagine that a child was to enter your work area</b></p> <ul style="list-style-type: none"> <li>What would you warn them to be extra careful of?</li> <li>What would do to reduce the harm to them?</li> </ul>  | <p><b>F What are the special hazards?</b></p> <ul style="list-style-type: none"> <li>What occurs only occasionally-for example during maintenance and other irregular work?</li> </ul>   |

As each hazard is identified they need to be listed in the boxes under the column "What harm can happen to people or equipment" as shown in the figure below.

| Hazard Identification |   |
|-----------------------|---|
| No.                   | What harm can happen to people or equipment |
|                       |   |
|                       |   |

List each hazard in the boxes



### Risk Assessment

When all hazards relating to a project have been identified, then a risk score needs to be assigned to each hazard. A risk score is determined by considering the consequence of the hazard occurring and the likelihood of the hazard occurring. By using the table below the risk score is identified. Use the three steps in the diagram below to calculate the risk score.

| Step 1 – Consider the Consequences  |                             | Step 2 – Consider the Likelihood  |  | Step 3 – Calculate the Risk   |     |     |     |     |
|---|-----------------------------|---|--|---|-----|-----|-----|-----|
| What are the consequences of this incident occurring? Consider what <u>could reasonably</u> have happened as well as what actually happened. Look at the descriptions and choose the most suitable consequence. |                             | What is the likelihood of the consequence identified in step 1 happening? Consider this without new or interim controls in place. Look at the descriptions and choose the most suitable Likelihood. |  | 1. Take step 1 rating and select the correct column<br>2. Take Step 2 rating and select the correct line<br>3. Circle the risk score where the two ratings cross on the matrix below.<br>E = Extreme, = High, M = Medium, L = Low<br>N = Negligible<br>Risk Score = ..... |     |     |     |     |
| CONSEQUENCES  |                             | LIKELIHOOD  |  | CONSEQUENCES  |     |     |     |     |
| Consequence   | Description                 | Likelihood  | Description  |   | Maj | Mod | Min | Ins |
| Major   | Death or extensive injuries | A   | The event is expected to occur in most circumstances | LIKELIHOOD  | E   | E   | H   | M   |
| Moderate  | Medical treatment           | B   | The event could occur at some time                   |   | E   | H   | M   | M   |
| Minor   | First aid treatment         | C   | The event could occur, but only rarely               |   | H   | M   | M   | L   |
| Insignificant   | No treatment                | D   | The event may occur, but probably never will.        |   | M   | M   | L   | N   |

Once the risk score has been identified begin to list any control measures that SECTE already has in place to prevent the identified hazard from occurring. This involves you needing to understand what policies and equipment SECTE already has in place to provide a safe and healthy work environment for you. This can be found by reading SECTE OH&S documentation found on the SECTE website.

The boxes that this information needs to go into are shown below:

| Risk Assessment |   |
|-----------------|---|
| Risk Score*     | List any Control Measures already implemented |
|                 |   |

### Risk Control

The next stage involves the student identifying what other actions can be put in place to further reduce the harm or likelihood of the hazard occurring. You need to identify who is responsible for the further action and provide a due date to implement any changes if required.

The boxes that this information needs to go into are shown below:

| Risk Control                                 |                  |         |
|--|------------------|---------|
| Describe what can be done to reduce the harm | Whom Responsible | When By |
|  |                  |         |



## Review

The Review section of the form is used to consider if the controls that you and the school have put in place are effective for the hazards you have identified.

The boxes that this information needs to go into are shown below:

| Review                      |                |
|-----------------------------|----------------|
| Are the Controls Effective? | Date Finalised |
|                             |                |

It is important that once the risk assessment process is completed you remember all items you have listed and you continue to obey all rules that govern your well being. As Engineer you are now a professional and you have a very high standard to meet.



### Example

A student is doing a software intensive project. All that is required is software that is used in a Laboratory. Below is the process required to assess the risks involved in this project. Please note only a couple of items are listed and many more risks can be identified.

To begin go through the list of Hazard items. Below is a list of items that are relevant to our example project.

#### What Is a Hazard?

C - Can workplace practices cause injury or sickness?

- Can people work in a comfortable posture?
- If the work is repetitive, can people take breaks?

Once we have identified our hazards we identify the risk score. If we consider the consequence of bad posture we may have the consequence of needing medical treatment due to a back strain. The likelihood of that occurring would be the event could occur, but only rarely. Therefore if we place this information into the risk table we would determine that the risk is Medium.

We now need to identify what control measures are already implemented. The school provides ergonomic chairs that can be adjusted in height and the back position altered. Then we need to consider what else can be done to minimize the risk. This can be done by sitting at the computer correctly. Keep a straight back. Have the screen set so the top of the screen is level with your eyes. Have elbows at 90 degrees, knees at 90 degrees and feet on the floor, and wrists straight while at the keyboard. Take regular breaks from the computer and stretch.

An example of the form being filled out is shown below:

|   |   |     |   |   |        |                        |     |         |
|---|---|-----|---|---|--------|------------------------|-----|---------|
| 3 | Continual work without a break - computer-induced eyestrain can damage eyesight permanently | Med | Take Regular breaks from looking at a computer screen. don't work in poorly lit area.   | Take Regular breaks from looking at a computer screen. don't work in poorly lit area.                                   | Myself | As work is carried out | Yes | 10/3/08 |
| 4 | Bad posture - bad posture can result in many problems later in life                         | Med | Keep a straight back<br>Have the screen set so the top of the screen is level with your eyes<br>Have elbows at 90 degrees<br>Knees at 90 degrees<br>Feet on the floor<br>Wrists straight while at the keyboard<br>Ensure an ergonomic chair is used | Take Regular breaks from computer.<br>Stretch neck, legs, ankles, back, arms, wrists, hands and fingers throughout work | Myself | As work is carried out | Yes | 10/3/08 |

Use this example as a guide and think up a few more hazards that may be a result of your project. Do not hand in a form that simply copies this page. **Forms that do not contain any other hazards will be returned as incomplete.**