**Unit 12: Project Management and Managing Risk**

Welcome to week 12 where we will be considering project management and how to manage risk within a project through adequate reporting and control tools.

Project management is the controlling of processes and activities that are related to a project. A Computing project refers to any project that deals with computing infrastructure and information systems. Whilst all projects may be focused, time specific and unique, what they seek to achieve and the environment within which they are being implemented can vary, greatly. It would be naive to assume therefore that a ‘one size fits all’ approach can be taken to project management. You will be introduced to some of the principal methodologies for managing projects.

It is unusual to encounter a project where project managers and team members feel all aspects of the project are under control. Selecting the best metrics to measure project performance is pivotal to the project’s success. In turn, assessing risks can be problematic. The risk-free project does not exist, and it is not possible to avoid the risks completely. Many risks are not visible at the start of a project, but the most significant potential risks need to be calculated and planned.

The unit will also cover how to manage the inevitable changes that will occur within a project life. What can frequently happen during a project implementation is that a need or desire for change is identified. Sometimes this is because corrective action is required to keep the project on plan and within budget, sometimes it is because of environmental changes (i.e. the project itself needs to be amended and at other times it may be requested). To ensure that the impact of change is minimised and/or to identify how it will impact on the project plan, scope, outcomes, it is essential that the Project Manager controls changes through a change control process. The management of risk and change is important to ensure that project quality is maintained and to minimise impact on project cost and planned time frames whilst taking advantage of opportunities which may be identified during the process also.

Project management and risk management, as it applies to the individual capstone project, will be covered during the Project module.

**In this unit we shall:**

* Define and explain the concept of project management.
* Introduce you to the concept of project life cycles and project methodologies.
* Explore how projects can be impacted by risk and uncertainty.
* Learn about the relationship between risks, assumptions and constraints and the threats and opportunities which risks can pose.
* Learn how to develop a risk management plan and change management process for projects.

**On completion of this unit you will be able to:**

* Define and explain the concept of project management.
* Demonstrate an appreciation of project life cycles and methodologies.
* Appreciate some of the technologies/software needed to support remote collaboration.
* Understand and explain how projects can be impacted by risk and uncertainty.
* Prepare a risk management plan.
* Appreciate how to control risk and manage project change effectively.