



Swinburne University of Technology
Faculty of Science, Engineering and Technology
(FSET)

Final Year Research Project 1 (Eng.|Bus.) – EAT40001

Assessment Topic: Research Plan

Introduction

The research process follows a basic format. It begins with a question arises that has no known solution (either named as research question or statement of research problem). After several steps including proposing hypotheses, searching literature, collecting data, analysing and interpreting the data; the research process might apparently resolve the research problem or not. If not, the research process either continues in different ways or will be postponed to the time that new data will be available.

Nothing helps a research work be effective so much as carefully planning the overall design of the research. In planning the research design, it is extremely essential for the researcher not only to choose a viable research problem, but also to consider the types of data that an investigation of the problem will require. It is also crucial that to choose a reasonable method of collecting and interpreting those data.

In subject unit Final Year Research Project 1 (Eng.\Bus.), we ask students to prepare a research plan. It is anticipated that after discussions with your supervisor and reviewing of preliminary literature, you will recognize an area of specific interest that you would like to investigate in more details. This assessment is intended to assist you clarifying the specific things you would like to achieve in your research journey; including the research requirements and any approach that is necessary.

Description

This should be a document written in the form of a tender or grant proposal, which makes the case for the proposed project based on an initial preliminary investigation. It should include statements on:

- The basic research (and possibly design) question, with enough background literature to show that the problem is an outstanding one and has some validity (it is not simply a whim of the student or supervisor).
- A statement of the aims of the project.
- An outline of the methodology or program design (any theory, data required, etc.), and an outline of the methods that will be used in answering the research question, e.g. experiments, simulations, theoretical modelling, surveys, etc.
- A description of the required resources, and how these resources will be sourced.
- *A plan for conducting the research over the remainder of the project, including timelines.*
- *For group projects, a general outline of the division of tasks amongst the group members.*

It is recommended that the specific structure of the proposal should be negotiated with your supervisory team. As it highlighted above in italic, the following documents are required in your research plan:

- 1) The Gantt chart of project overview and outlines for semester 1 and 2 plans.
- 2) The outline of group tasks allocation among team members.

This research plan should address both engineering and business themes of your research project and should be relatively short in length; **4 pages or approximately 3000 words**.

Purpose

The purpose is to ensure that students have a clear idea of what it is they are trying to achieve at an early stage, in terms of the research required and any design work that is required. Writing in a tender or grant proposal style means that students will need to focus on what they want to do, how they will do it, and whether it is achievable with the available time and resources.

Notice

Penalty for late submission is 10% deduction per day following the submission deadline **Friday 28th of April**.