GETTING STARTED ON A PROJECT

WHY THE PROJECT

The project is one of the most important parts of your degree program for two reasons. One follows from the project’s principal objective:

To demonstrate your potential as a professional.

The second relates to your career. When you leave Curtin, how will potential employers judge you? Through an interview they will assess your personal attributes such as your abilities as a team worker. However, professionally all they have is your academic record - meaningless to most - and the thesis you write as part of the project. If your intentions are to progress to postgraduate studies, then again your thesis is the primary proof you have the ability to do so. Thus your thesis is the means to advance yourself.

You need to be thinking about a project in the semester before you formally enroll. Then you progress through these stages

THE FIRST STAGE: CHOOSING A PROJECT

You have three options for choosing a project:

* Staff option
  If you wish a project in a given area, note the staff interests on the Department’s web pages and then approach the appropriate staff member to determine a suitable project.

* Industry option
  The Department encourages industry projects, but be aware of the conditions that apply. See the Guide to Projects for full details, but a brief summary is as follows:

1. The Department does not seek out industry projects; you must find them yourself. The Career’s Office may be able to assist.
2. The project must be approved by the Projects Coordinator
3. Your project must be supervised by a qualified professional engineer or equivalent at the industry site. That supervisor needs to send the Projects Coordinator a letter indicating their willingness to supervise and stating their position.
4. You cannot use University facilities for an industry project. If you or they wish to, then a formal contract will need to be drawn up. Doing work for charitable or non-profit organisations is a grey area; speak to the Projects Coordinator on what is proposed to gain a ruling.
5. Before you can start such a project, we must have a letter from the organisation allowing public disclosure of your thesis.
6. You need to check with the organisation on whether their insurance policy covers you working at their site. If not, then you will need to seek an extension to the University’s policy.
7. You will also need to find a supervisor within the Department to assist you in writing the thesis.

* Student Option
You can nominate your own project. You need to do two things:

1. Sketch out what you propose to do outlining what you see as the major challenges. This includes things you will need to learn and any additional skills you will have to gain.
2. From the following pages, identify a staff member who might be interested in that topic and then approach them. If they are willing to accept the project – possibly subject to modification – then fine, if not you will need to find someone else. If you cannot, then you will just have to change the project.

THE SECOND STAGE; PREPARING FOR THE PROJECT
A reason you need to organize the project a semester ahead is that there is a great deal of preparation work too complete before the semester begins. In particular you need to:

* Read
As part of your project, you will be identifying a problem then suggesting a solution to that problem. How can anyone have confidence in your solution if there is no evidence you are aware of current practice, technology and so forth? You need to search the web, haunt the library and take other actions so that you know what others have done to solve this problem and what tools and resources you need to do so.

* Plan
The project’s principal objective is to demonstrate your potential as a professional. A key feature of engineering is that it is a planned activity. Boeing does not commit billions of dollars for developing a new jet on the basis it might be better; they make very sure they know well before they start. You need to do the same. You need to develop a project plan that identifies how you will spend your time. It has to be realistic in the sense you must set priorities and stick to them. If you are unsure how to plan, then visit the library and borrow a book on project management.
Planning is quite critical. The times you set for activities will also determine your approach. If you feel you can only allocate, say, one week to the design and development of an amplifier, then it suggests you either buy one off the shelf of simply build a very standard unit. There is nothing wrong with that; this is what engineering decision making is all about. At the very least your plan has to be a Gantt chart.

* **Logbook**

Integral to engineering is keeping a log book. You enter critical information – design sketches, ideas, test results and so on. So, begin by entering your plan and then your summaries of your reading. Date everything. You will need to keep summaries of your meetings with your supervisor. Further, you need to get your supervisor to sign your logbook as proof the meeting happened. Note that you **must** meet with your supervisor at least fortnightly.

**ASSESSMENT IN THE PROJECT UNITS**

Some conditions on enrolment in the first project unit:

* You must submit a project registration form to the Projects Coordinator before the end of the first week of semester or your enrolment will be cancelled.

* You must present to the Projects Coordinator a copy of your project plan, the Patents form and the Copyright form by the HECS cut-off date or your enrolment will be cancelled.

* You must present at the end of the semester your log book to your supervisor.

Assessment in the unit is as follows:

* You will be required to give a 15 minute seminar on progress on your project covering what you have achieved and what you expect to achieve.

* There will be 5 minutes of questions.

* The presentation will be to a panel of three; your supervisor as chair, another from the same discipline and a third person. They will decide a result for you as P or F; P meaning satisfactory progress and F meaning it is not.
For the second project unit, you are required to present on or before 4.00 Pm on the Friday of the last teaching week:

* A hardbound copy of a thesis in the required format. (See the Guide to projects.)

* An additional copy of the thesis.

* Two additional documentation sheets; a marking sheet and a title sheet.

* A CD/DVD of your thesis in pdf or Word format.

* An A1 sized poster in electronic form as a pdf outlining your project and your accomplishments. (Emailed to the Projects Coordinator.)

* Your logbook.

The assessment is 10% for the logbook, 5% for the poster and 85% for the thesis. Your thesis has two examiners, one of whom is your supervisor, but a third examiner may be called in if the Projects Coordinator feels that is warranted. Assessment is holistic. That is to say, examiners are asked for general qualities of the thesis such as is it balanced, is the background research extensive enough and are the conclusions drawn reasoned. Thus you do not get marks for specific features, but for the overall characteristic of the thesis. To do well, the thesis must be well-written, well-organised and demonstrate significant engineering abilities. See the Guide for further information on the assessment process.