BEB801-BEB802 Engineering Project

These two units taken together make up a single final year engineering project for students completing an engineering degree in Electrical , Mechanical , Aerospace, Medical, Software or Telecommunications Engineering: where a 24 credit-point (2-unit) final year project is a requirement of the degree..

Students may complete the two units in either a single semester, or over any two consecutive semesters. The second unit (BEB802) must be a continuation of the same project commenced in BEB801

Each student will complete an individual project under the supervision of a member of academic staff. Some students may also have external industry supervision in addition to their internal academic supervision at QUT.

Each project will include at least the following elements:

a plan of what is to be achieved,
a background literature review,
engineering technical content at 4^{th} year level
both written and oral presentation.

Students have considerable choice in selecting a topic for their project: however they need to be aware of the requirements of their specific degree program, which will often require the project to be part of their chosen major with content suitable to their specific discipline.

Suitability of a project topic will be determined by the academic supervisor.

Students must have regular meetings with their supervisor throughout the project at which they demonstrate their progress and discuss their ongoing project planning.

NOTE:

(1) The two unit codes (BEB801 and BEB802) are faculty wide units, with other sets of students enrolled who are working to different requirements set by their own schools. Please read emails and blackboard announcements with care, as these are sent to the entire unit enrolment and generally only apply to specific sets of students.
The timetabled lectures are also separate for different student groups.

(2) Civil Engineering students are only required to complete a 12 credit-point project and usually take BEB801only (not BEB802) to complete a smaller one-unit project: however they may choose to take both units and undertake a larger project.

(3) Students in degrees other than engineering (such as urban development & design) typically take BEB801 only.

Finding a BEB801-BEB802 Project Topic.

Students enrolled in BEB801/BEB802 need to organise their own project topic and arrange for academic supervision of their project. The individual project supervisors will be responsible for assessment of the projects.

Staff initiated Project Topics

Project topics initiated by members of academic staff are posted on Blackboard. To select one of these projects you need to approach the staff member, discuss the projects, and the staff member may then allocate their available projects to interested students, and take on the supervision and assessment of these students.

Externally initiated Project Topics

External Companies (and organisations such as “CEED” and “Engineers without borders”) may offer project topics suitable for a QUT final year engineering project. These projects may include external supervision, however the student is still required to organise an internal QUT academic supervisor. To select one of these projects you need to apply to the external organisation, and to arrange for a member of QUT staff to take on the academic supervision and assessment of your project.

Student initiated Project Topics

Students may develop their own project topic in consultation with a prospective academic supervisor. To do this you need to approach a member of staff with your project idea and reach an agreement that they will take on the supervision and assessment of your project. This includes "industry projects" where there may also be an industry supervisor external to QUT.

Suitability of Project Topics

It is the responsibility of the student’s supervisor to ensure that the agreed topic is suitable for assessment in BEB801/BEB802. This may require the supervisor to add or remove elements from student initiated topics to ensure that the scope and depth of the topic is suitable for a final year engineering project.

Topics must be based around the application of specific discipline knowledge gained during undergraduate study, and should be at 4^{th} year level of complexity. As a general guide, students should view the technical aspects of their project as sufficiently advanced that they would not have been able to complete the project with the level of engineering ability which they possessed at the end of the 2^{nd} year of their undergraduate studies in engineering.

Registration of Project Topics

Students must register their project by completing the project registration form, signed by their supervisor, and submitted to their school’s project coordinator, before the end of week 3.

BEB801-BEB802 Assessment

Students completing a 2-unit (24 credit point) project within their Engineering degree need to enrol in both BEB801 and BEB802.

Enrolment may be either both BEB801 and BEB802 in the same semester, or BEB801 followed by BEB802 in the next semester.

Assessment details are slightly different for the two enrolment methods.

Enrolment in both units in a single semester.

(1)	Project Proposal	20%	Friday Week 5
(2)	Presentation	20%	Thursday Week 14
(3)	Project Report (formal written report)	50%	Friday Week 13
(4)	Technical Paper	10%	Friday Week 13

Note: a single grade will be assigned to both the enrolled units.
Items (1) and (3) will be assessed by the student's academic supervisor.

Enrolment over two semesters.

BEB801

(1)	Project Proposal	40%	Friday Week 5
(2)	Progress Report	60%	Friday Week 13

BEB802

(3)	Progress Appraisal	20%	Friday Week 8
(4)	Presentation	20%	Thursday Week 14
(5)	Project Report (formal written report)	50%	Friday Week 13
(6)	Technical Paper	10%	Friday Week 13

Note: different grades may be awarded for each of the two project units.
Items (1), (2), (3) and (5) will be assessed by the student's academic supervisor.

Additional assessment items for 2 semester projects are not intended to create additional workload, but to ensure that students maintain regular progress throughout their projects.

BEB801-BEB802 Assessment Items

Project Proposal
A written project proposal describing the project topic: including a breakdown of what will be done, with a prospective time plan for completing the project, and a Library based assignment which will introduce students to a variety of library resources which are available for completing their project. This should form the basis of the literature review section of the project, with the expectation that the student will continue to add reference material as they complete their project.

Progress Report (2 Semester Projects)
A written report presented at the end of the first semester of a two-semester project. Students should aim to write up any completed sections of their final project report for presentation as a progress report. Typically this might include a literature review and initial design work or planning of experiments, together with a detailed plan for completion of the project over the following semester.

Progress Appraisal (2 Semester Projects)
The supervisor's assessment of the student's progress towards completing the project.
This does not require a written submission (unless requested by the supervisor).
Students must have a meeting with their supervisor in week 8 at which they present evidence of their progress toward completion of their project. Typically this will include completed design or analysis work, or completed experimental results, and a plan for completing the remaining work and presenting the project outcomes.

Presentation
A one-day showcase presentation of the student's project, conducted at a professional standard. This will include an A1 size poster, any manufactured items, together with short oral presentations to academic staff and other visitors throughout the day, including answering questions from the audience.

Project Report
A written presentation of the student's project, presented at a professional standard.
This is usually a written report of approximately 75 pages, (12 point font, 1.5 line spacing, including references) plus any attachments or appendices as required.

Technical Paper
A written presentation of the student's project, presented at a professional standard, in the form of a journal or conference paper. Between 8 and 10 pages in length (12 point font, 1.15 line spacing, including references) focused on the technical outcomes of the project.

All three final presentations of the student's project should include the following aspects: sufficient introductory material to demonstrate the student's knowledge of the general topic area, sufficient technical content to demonstrate the student's ability to apply specific engineering discipline knowledge to the project topic, a summary of the project outcomes which clearly defines the student's individual contribution to achieving the project outcomes, and a demonstration of the student's ability to communicate effectively at a professional level.

BEB801-BEB802 Timeline for completion.

Enrolment in both units in a single semester.

Week 1	Finalise topic selection and supervision details		
	Submit project registration form		
	Initial meeting with Supervisor		
	Commence literature review		
Week 2	Develop project proposal		
Week 3	**Final due date for:**	**Project Registration Form**	**Friday Week 3**
Week 4	Confirm project proposal details with supervisor		
	Complete literature review and planning		
Week 5	Commence technical aspects of the project		
	Final due date for:	**Project Proposal**	**Friday Week 5**
Week 6	Meeting with supervisor, assessment feedback		
Week 8	Meeting with supervisor, demonstration of progress		
Week 10	Completion of technical aspects of project		
Week 12	Meeting with supervisor, draft of final report		
Week 13	**Final due date for:**	**Project Report**	**Friday Week 13**
		Technical Paper	**Friday Week 13**
Week 14	**Final Due date for:**	**Presentation**	**Thursday Week 14**

Enrolment over any two consecutive semesters.

First Semester of the Project

Week 1	Finalise topic selection and supervision details		
	Submit project registration form		
	Initial meeting with Supervisor		
	Commence literature review		
Week 2	Develop project proposal		
Week 3	**Final due date for:**	**Project Registration Form**	**Friday Week 3**
Week 4	Confirm project proposal details with supervisor		
	Complete literature review and planning		
Week 5	Commence technical aspects of the project		
	Final due date for:	**Project Proposal**	**Friday Week 5**
Week 6	Meeting with supervisor, assessment feedback		
Week 8	Meeting with supervisor, demonstration of progress		
Week 12	Meeting with supervisor, draft of progress report		
Week 13	**Final due date for:**	**Progress Report**	**Friday Week 13**

Second Semester of the Project

Week 1	Meeting with supervisor, planning for progress		
Week 4	Meeting with supervisor, demonstration of progress		
Week 8	Meeting with supervisor, demonstrate progress		
	Final due date for:	**Progress Appraisal**	**Friday Week 8**
Week 10	Completion of technical aspects of project		
Week 12	Meeting with supervisor, draft of final report		
Week 13	**Final due date for:**	**Project Report**	**Friday Week 13**
		Technical Paper	**Friday Week 13**
Week 14	**Final Due date for:**	**Presentation**	**Thursday Week 14**