

# ENGR 7002 ADVANCED ENGINEERING PROJECT 2

**Credit Points** 10

**Legacy Code** 301007

**Coordinator** Pan Hu (<https://directory.westernsydney.edu.au/search/name/Pan Hu/>)

**Description** In this subject, students will complete the major engineering project commenced in subject 301006 Advanced Engineering Project 1. The students are expected to develop advanced technical knowledge and skills in their field of study as well as the ability to function effectively as an individual in a team, with the capacity to be a leader or manager. The students are required to present outcomes using a professional report and an oral presentation.

**School** Eng, Design & Built Env

**Discipline** Other Engineering And Related Technologies

**Student Contribution Band** HECS Band 2 10cp

Check your fees via the Fees ([https://www.westernsydney.edu.au/currentstudents/current\\_students/fees/](https://www.westernsydney.edu.au/currentstudents/current_students/fees/)) page.

**Level** Postgraduate Coursework Level 7 subject

**Pre-requisite(s)** ENGR 7001

**Co-requisite(s)** ENGR 7013

**Restrictions**

Students must be enrolled in a postgraduate program.

## Learning Outcomes

On successful completion of this subject, students should be able to:

1. Apply the theoretical knowledge gained during the course to develop practical and innovative engineering solutions.
2. Apply the project management principles to completion of an engineering project.
3. Analyse the importance of client/ end-user consultation and satisfaction and develop engineering communication abilities on good oral presentation and engineering report writing skills.
4. Implement ethical, social, economic and environmental responsibilities that apply to engineers.
5. Apply time and financial management in the context of an engineering project.
6. Apply systems engineering methods for carrying-out systematic research.

## Subject Content

1. Development of integrated practical and innovative solutions to engineering problems.
2. Application of engineering project management skills.
3. Client/ end-user consultation process and satisfaction assessment.
4. Development of oral and written presentation skills appropriate to an engineer.
5. Evaluation of social, economic and environmental impacts of an engineering project.
6. Application of time and financial management skills.
7. Risk analysis.

8. Development of research skills.

## Assessment

The following table summarises the standard assessment tasks for this subject. Please note this is a guide only. Assessment tasks are regularly updated, where there is a difference your Learning Guide takes precedence.

Type	Length	Percent	Threshold	Individual/ Group	Mandatory Task
Quiz	1 hour online	20	N	Individual	Y
Presentatio	15 minutes in total with all team members to present	20	N	Individual	Y
Report	8,000 - 12,000 words per group (individual student contribution has to be stated)	60	N	Individual	Y

## Prescribed Texts

- Smith, KA 2014, Teamwork and project management, 4th edn, Team work and project management, McGraw-Hill Education, New York, NY