

ENGR 4010 MAJOR PROJECT COMPLETION

Credit Points 30

Legacy Code 300460

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Description Major Project Completion is the project realisation component of the student's final year program. The unit offers the student the chance to consolidate the range of methodologies and processes developed and evaluated in Major Project Commencement, that contextualise the principles and practices that will lead to the realisation of their identified design solution. The final design outcome will form part of the final year graduate exhibition. The design solution which students will be developing and submitting for this unit responds to the design brief developed in Major Project Commencement.

School Eng, Design & Built Env

Discipline Other Engineering And Related Technologies

Student Contribution Band HECS Band 2 30cp

Check your HECS Band contribution amount via the Fees (https://www.westernsydney.edu.au/currentstudents/current_students/fees/) page.

Level Undergraduate Level 4 subject

Pre-requisite(s) ENGR 4009

Restrictions Students must have completed Industrial Design/ Engineering Workshop Safety Training.

Assumed Knowledge

Knowledge related to the successful completion of Year 3 Industrial Design is assumed and successful completion of Major Project Commencement.

Learning Outcomes

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

1. Plan, manage and report on an in-depth design investigation.
2. Craft an exhibition standard presentation model.
3. Produce detailed industry-standard technical specifications for the manufacture and assembly or production of their design solution.
4. Generate engaging, professional graphic communications that explain their design solutions to a wide audience.
5. Present and defend a logical argument for the novelty, sensitivity/ appropriateness and feasibility of a design solution supported by scholarly and practical research and conceptual exploration and development to a wide audience.
6. Communicate how design decisions were arrived at with a detailed visual process diary and concept development models.
7. Prove the structural and/or mechanical integrity and manufacturability of any physical design solutions.

Subject Content

Core area studies which the subject supervisors will guide students through.

Staff/student meetings called on a needs basis to address final year management issues, e.g. exhibition.

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.

Item	Length	Percent	Threshold	Individual/ Group Task
Applied Project	A4 x 5 page written document	10	N	Individual
Applied Project	1 x A3 Process Diary (50 pages), 1 x A3 set of draft engineering drawings, 1 x exploratory physical model (scale 1:1)	30	N	Individual
Applied Project	1 x A3 Final set of engineering drawings to AS1100, 1 x 3D CAD model, 1 x presentation model (scale 1:1), 1 x Powerpoint audio visual presentation (5 slides), 1 x A3 Graphic communication	60	N	Individual

Teaching Periods