

# ENGR 4029 INDUSTRIAL DESIGN PROJECT (COMPLETION)

**Credit Points** 40

**Legacy Code** 300774

**Coordinator** Richard Yang ([https://directory.westernsydney.edu.au/search/name/Richard Yang/](https://directory.westernsydney.edu.au/search/name/Richard%20Yang/))

**Description** The Industrial Design Honours Program provides students with an opportunity to apply their industrial design skills to an in-depth year long design research project. In Industrial Design Major Project (Completion), Honours candidates respond to the research findings and design brief that they produced in Autumn semester. They undertake detailed design development to resolve and communicate a final design solution, which is publicly exhibited at the end of the year. Their design and research communications present a strong argument for the final design and demonstrate the honours candidates capacity to undertake postgraduate design research and to join professional design practice.

**School** Eng, Design & Built Env

**Discipline** Other Engineering And Related Technologies

**Student Contribution Band** HECS Band 2 40cp

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** Undergraduate Level 4 subject

**Pre-requisite(s)** ENGR 4028

**Equivalent Subjects** LGYB 1049 - Industrial Design Project (Completion)

**Restrictions** Students must be enrolled in Bachelor of Industrial Design or Bachelor of Industrial Design (Honours). Ethics clearance must be obtained if required.

## Assumed Knowledge

Knowledge related to the successful completion of year 3 Industrial Design is assumed and successful completion of Industrial Design Project Commencement and Industrial Design Project Commencement's co-requisite subjects.

## 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. Produce a scholarly exegesis which demonstrates a critical, comprehensive understanding of industrial design methods.
3. Craft an exhibition standard presentation model.
4. Produce detailed industry-standard technical specifications for the manufacture and assembly or production of their design solution.
5. Generate engaging, professional graphic communications that explain their design solutions to a wide audience.
6. 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
7. Communicate how design decisions were arrived at with a detailed visual process diary and concept development models.

8. Prove the structural and/or mechanical integrity and manufacturability of any physical design solutions.

## Subject Content

Industrial Design Project (Completion) is the project realisation component of the students' final year of their studies.

The unit is composed of weekly lectures, tutorials, workshops and consultation sessions: core area studies which the subject supervisors will guide students through and staff/student meetings called on a needs basis to address final year management issues; eg. exhibition.

Topics discussed in the sessions include:

Research Methodology  
Qualitative Analysis  
Quantitative Analysis  
Thesis Writing  
Low and Hi Fidelity Prototyping  
Career and Graduate Options

## 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 Task
High Resolution Working Model	Working Model	35	N	Individual
Visual Process Diary Completion	A4 Visual Process Diary	3	N	Individual
3D Modeling & Engineering Drawings	Drawings	20	N	Individual
Exegesis	6000-8000 words (5000 words submitted in 300773)	40	N	Individual
Checkpoint Presentations	1) Concept Development (10 minute presentation) 2) Concept Development (10 minute presentation)	2	N	Individual