ENGR 4004 DESIGN STUDIO 6: AMBIENCE, PLACE AND BEHAVIOUR

Credit Points 10

Legacy Code 301084

Coordinator James Berry (https://directory.westernsydney.edu.au/search/name/James Berry/)

Description Designers responding to complex societal challenges require focus on people, places and systems thinking to make sense in guiding new investment in innovation. This unit builds industrial design expertise in four domains including human environments, responsible design, user-centred design, and technology development through applied design research, contextual inquiry methods, and articulation of innovation proposals through conceptual and validated physical modelling, and an interdisciplinary consultative viewpoint.

School Eng, Design & Built Env

Discipline Other Engineering And Related Technologies

Student Contribution Band HECS Band 2 10cp

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 4003

Equivalent Subjects ENGR 3011 - Design Studio 4 Simulate to Innovate

Learning Outcomes

On successful completion of this subject, students should be able to:
1. Apply design processes, knowledge and skills to develop a product to meet tangible and intangible user needs.
2. Apply the principles and values embedded in formal professional , legal and industry standards.
3. Provide evidence of iterative design evolution through design research, prototyping and ePortfolio of work.
4. Produce functional and efficient market ready products according to needs, manufacturing constraints, and interdisciplinary protocols.
5. Use lifecycle management principles (e.g. cradle to cradle, analysis of materials and processes, CES EduPack) in the design of products or systems.
6. Scaffold an industrial design capstone project by developing a design brief toward creating a new value proposition of social, economic, and environmental significance.

Subject Content

Design brief development of relevance to a local real-world context
Cultural probe study
Product Development meeting tangible and intangible user needs
Product and service life cycle management

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
User Experimentation: Empathic, experiential, affective and meaningful value adding through iterative prototyping and visualization.	3 low fidelity prototypes, 4 concepts, Pecha Kucha, e-Portfolio, 1000 words report.	35	N	Both (Individual & Group)
User-Centered Design: Iterative process of strategy, analysis, specification, design, evaluation and product launch and e-Portfolio submission.	3 high fidelity prototypes, 4 concepts, Pecha Kucha, e-Portfolio, 2000 words report.	65	N	Individual

Prescribed Texts

- De Bont, C, den Ouden, E, Schifferstein, R, Smulders, F & van der Voort, M (eds) 2013, Advanced Design Methods for Successful Innovation, 3TU.Federation.

Teaching Periods