UNIVERSITI TEKNOLOGI MARA

IDE600: DEGREE PROJECT I

Course Name (English)	DEGREE PROJECT I `APPROVED`
Course Code	IDE600

MQF Credit	3

Course Description	This course aims to prepare students for developing their understanding in Industrial Design Research and Development. This course will give students capability to apply their knowledge in design & Research Methodology to understand the needs of user in terms of design performance, usability, manufacture and commercial values. The course is designed to supervise student develop their Final Degree Project proposal and integrating them with their Project Report as to fulfill their academic writing course. At this semester, the programme department will appoint Final Design and Project Report supervisor to assist them focusing on any Industrial design selected area topic such as kids, aged and disabled products, household appliances, mobile communication product, contract furniture, office and commercial furniture, outdoor furniture, boat and yachts design, automotive, aircrafts and commercial transport.

Transferable Skills	Student can do research and can search the problem before developing and designing the new product.

Teaching Methodologies	Lectures, Blended Learning, Reading Into Writing Task, Simulation Activity, Problem Based Learning (PBL), Presentation

CLO	CLO1 To introduce students to appropriate research methods and communication techniques to inform the generation, modification, and development of design ideas.
	CLO2 To develop students' critically analyse, interpret and apply research data to the development of design projects.
	CLO3 To expose students to the uses of design processes in the development and production of design solutions to meet identified needs and opportunities.

Pre-Requisite Courses	No course recommendations

Topics
1. INTRODUCTION & BRIEF ON DESIGN RESEARCH
2. PROJECT RESEARCH/ BACKGROUND & PROBLEM / SCENARIO PROPOSAL
3. LITERATURE REVIEW
4. ANALYSIS/IDENTIFYING USERS, NEEDS & COMMERCIAL VALUES
5. DESIGN METHOD/ RESEARCH METHODOLOGY
6. CONCEPT SOLUTION & DESIGN CONSIDERATION
7. DESIGN & PRODUCTION CONSIDERATION ANALYSIS
8. PROJECT DESIGN PRESENTATION PROPOSAL
9. IDEATION CONCEPT GENERATION
10. PROPOSE DESIGN CONCEPT DEVELOPMENT
11. MOCK-UP & FORM DEVELOPMENT
12. FINAL DESIGN/PRODUCT SPECIFICATION STUDIES
13. FINAL DESIGN CONCEPT
14. FINAL DESIGN RESEARCH & PROJECT PRESENTATION

Assessment Breakdown	%
Continuous Assessment	40.00%
Final Assessment	60.00%

Details of Continuous Assessment	Assessment Type	Assessment Description	% of Total Mark	CLO
	Assignment	Literature review on the Design Issue. and review presentation on the Design Issue: Presenting findings obtained from written and digital references related to the Design Issue, and pointed out the significance of providing problem solution through design activity.	10%	CLO1
	Assignment	1. Conduct research on product usability and user expectation: Select the proper method for conducting user research to identify the actual need and expectation from the user in using the product. Prepare a set of presentation to elaborate the result of user research. 2. Presentation on user research: Presenting findings obtained from performing data collection from the user and product usability performance to produce direction for the most potential new product to be developed.	10%	CLO1 , CLO2
	Assignment	1.Preparing product concept proposal for development: Preparing proposal for development of a new product based on the findings and directions obtained from the conducted research. 2.Presentation on product concept proposal: Presenting proposal for development of a new product, highlighting general details regarding the proposed concept .	10%	CLO1 , CLO2
	Assignment	1. Preparing review of progress on design ideation and development: Preparing presentation on the latest progress of ideation sketches and design development of the proposed product concept. 2. Review of progress on design ideation and development: Presentation on the latest progress of ideation sketches and design development of the proposed product concept.	10%	CLO1 , CLO2 , CLO3

Reading List	Reference Book Resources	• Clement C. Wilson, Michael E. Kennedy and Car 1996, *Superior Product Development: Managing the Pr*, Blackwell Publishers
		• Fowler, T.C. 1997, *Value Analysis in Design*, Wiley, John & Sons, Inc.
		• Kmetovicz, R.E. 1992, *New Product Development, Design and Analysis*, Wiley, John & Sons, Inc.
		• Ulrich, K. and Eppinger, S. 2000, *Product Design And Development*, McGraw-Hill

Article/Paper List	This Course does not have any article/paper resources
Other References	This Course does not have any other resources