UNIVERSITI TEKNOLOGI MARA

IDE665: APPLIED INDUSTRIAL DESIGN II

Course Name (English)	APPLIED INDUSTRIAL DESIGN II APPROVED
Course Code	IDE665
MQF Credit	6
Course Description	This course is a self directed module and the lecturer will act as a facilitator in guiding the students on design direction. It is based from a self-interest project whereas the problem solving of the project will be explored through creative design process and thinking. This course is design to educate students about the process of developing, analyzing and making a decision on innovative proposals and ideas on creative design solution.
Transferable Skills	Students will be able to manage the project independently with the time frame given and apply all Research and Design Development processes effectively.
Teaching Methodologies	Lectures, Blended Learning, Discussion, Self-directed Learning, Supervision, Project-based Learning, Problem-based Learning
CLO	CLO1 Demonstrate creative design process & thinking CLO2 Demonstrate and strengthen up own ideas and individual identity in design and the new concept (design solutions) based on current trend & users' needs CLO3 Determine the best design concept solution in integrating the creative project intention, problem identification and outcome expectation
Pre-Requisite Courses	No course recommendations

Topics
1. Introduction 1.1) Brief on the project schedule
2. Study on market trends and market segmentation 2.1) Existing Product Analysis (EPA)
3. Establish Design Criteria 3.1) Persona, Scenario, Storyboard, Image Panel, etc
4. 2D Development 4.1) Generate initial ideas through thumbnail sketches and idea development process
5. Product Development 5.1) Technology, Material, Production process feasibility
6. 3D Development 6.1) Development on series of mock-up of the selected concept
7. Product testing 7.1) Usability test
8. Final Design 8.1) Informative sketches
9. Technical Aspect 9.1) Preliminary technical drawing
10. Presentation Drawing 10.1) 3D Drawing / Animation and compilation of work for final assessment

Assessment Breakdown	%
Continuous Assessment	100.00%

Details of Continuous Assessment

Assessment Type	Assessment Description	% of Total Mark	CLO
Assignment	Proposal of design concept	10%	CLO1
Assignment	Existing Product Analysis (EPA) Study current market trends & market segmentation of product Establish design criteria	10%	CLO2
Assignment	2D and 3D Development (Sketches Development & Mock-up Development)	20%	CLO3
Final Project	1. Compilation of Final Project portfolio 2. Design Development 4. 3D Modelling 3. Presentation	60%	CLO3

Reading List

Recommended Text

- **Dan Cuffaro,Isaac Zaksenberg 2013, *The Industrial Design Reference & Specification Book*, Rockport Pub [ISBN: 9781592538478]**
- **Simon King,Kuen Chang 2016, *Understanding Industrial Design*, Oreilly & Associates Incorporated [ISBN: 9781491920398]**

Reference Book Resources

- **Steven Selikoff 2020, *The COMPLETE BOOK of Product Design, Development, Manufacturing*, Independently published [ISBN: 979864913442]**
- **Phaidon Editors 2020, *The Design Book, New Edition*, Phaidon Press [ISBN: 1838661433]**
- **Charlotte Fiell,Peter Fiell, *Industrial Design A-Z* [ISBN: 3836522160]**

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