UNIVERSITI TEKNOLOGI MARA

CID620: NEW PRODUCT DEVELOPMENT-INDUSTRIAL COLLABORATION

Course Name (English)	NEW PRODUCT DEVELOPMENT-INDUSTRIAL COLLABORATION APPROVED
Course Code	CID620
MQF Credit	3
Course Description	This course will be preparing students to understand the important of NPD as a design-oriented academic field that is interdisciplinary in nature and brings together economists, organizational theorists, educators, social psychologists, sociologists, anthropologists and scientist to work together in one organization based on actual industrial planning. The expertise of researchers in various and combined disciplines help designer to identify venues for possible development. Despite the variety of disciplines, NPD is an identifiable research field focused on understanding characteristics of interdependent group work with the objective of designing adequate design technology development to support such cooperative work. NPD is a design team which responsible to create the next product in a company's product line through product development process steps. Starting with a product idea, the team moves through several stages to generate all the details and documents needed to get the product built. A NEW product development (NPD) process goes through the same steps, however as this product has not been developed by the team before, new risks and uncertainties are introduced and often additional information is documented and shared with manufacturing. Through this introductory approach students able will gain bigger view on the needs of the industry nature and prepared to align their knowledge to the outside world.
Transferable Skills	Entrepreneurial skill
Teaching Methodologies	Lectures, Blended Learning, Studio, Tutorial, Presentation
CLO	CLO1 Identify the important of implementing real nature of design process in the real industry CLO2 Compare the differences of design process in academic and industry. CLO3 Demonstrates (C3) ideas of process flow in align to need of industry (A3)(P5)(PO8)
Pre-Requisite Courses	No course recommendations

Topics
1. INTRODUCTION 1.1) 1.Program Brief 1.2) 2.Course Brief
2. INTRODUCTION TO NEW PRODUCT DEVELOPMENT 2.1) 5 steps in NPD 2.2) 1.Concept 2.3) 2.Ide
3. NPD CONTINUOUS PLANNING 3.1) 1 NPD form 3.2) 2 DFF Form
4. CHALLENGES IN NPD 4.1) 1.Project Brief 4.2) 2.Design Snapshots 4.3) 3.Product
5. NPD – PLANNING IN BOM CONTROL 5.1) 1.Introduction to Bill of Material (BOM) 5.2) 2.Functions

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6. NPD – PRODUCTION
6.1) Process flow
6.2) 1.Lab procedure
6.3) 2.Pilot Production

7. 7 PHASES TO NEW PRODUCT DEVELOPMENT
7.1) 1.New Product Strategy Development
7.2) 2.Idea Generation
7.3) 3.Product Screening & Evaluation
7.4) 4.Product Development
7.5) 5.Test Marketing
7.6) 6.Commercialization
7.7) 7.Business Analysis

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Assessment Breakdown	%
Continuous Assessment	100.00%

Details of Continuous Assessment

Assessment Type	Assessment Description	% of Total Mark	CLO
Assignment	This assessment will be covering on a project presentation which relating to the report process of new product development to the existing major project which will be consisting design process from paperwork and material planning.	40%	CLO3
Case Study	This assessment will related to the existing case study of New Product Development filing system and process flow which consisting NPD & DFF forms	20%	CLO1
Presentation	This assessment will covering on the case study of comparing the challenges in existing New Product Development challenges	20%	CLO2
Quiz	This Quiz will be covering the week 1 to week 7 understanding on the New Product Development of which relates to the advantages and disadvantages of NPD process.	20%	CLO3

Reading List

Recommended Text

- **Edition Paul Trott 2011, *Innovation Management and New Product Development*, 5th Ed., Paperback [ISBN: 13:9780273736]**
- **Glen L. Urban, John R. Hauser 1993, *Design and marketing of new products*, 2 Ed., Prentice Hall Englewood Cliffs, N.J. [ISBN: 9780132015677]**
- **JonathanCagan, Craig Vogel Hardback 2012, *Creating Breakthrough Products Revealing the Secrets that Drive Global Innovation*, 2 Ed. [ISBN: 13: 978013301]**
- **Donald G. Reinertsen 1997, *5. Managing the Design Factory Donald G. Reinertsen* [ISBN: 10: 068483991]**
- **Marc H. Meyer 1997, *The Power of Product Platforms*, 1 Ed., Alvin P. Lehnerd Free Press [ISBN: 10: 068482580]**

Article/Paper List: This Course does not have any article/paper resources

Other References: This Course does not have any other resources

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