UNIVERSITI TEKNOLOGI MARA

EDT700: NEW PRODUCT DEVELOPMENT FOR MANUFACTURING

Course Name (English)	NEW PRODUCT DEVELOPMENT FOR MANUFACTURING APPROVED
Course Code	EDT700

MQF Credit	2

Course Description	This course will be preparing students to understand the important of New Product Development (NPD) as a design-oriented academic field that is interdisciplinary in nature and brings together economists, designers and scientist to work together in one organization based on real industrial practices. 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 product enhancement based on the production plant. The same production process need to be sustained with a consideration of new risks and uncertainties are introduced. Through this advanced manufacturing approaches, students will able gain a wide view on the needs of the industry nature and prepared to align their knowledge to the real managing practice.

Transferable Skills	Skills are related to the knowledge of New Product Development (NPD) that also related to production methods in designing new product.

Teaching Methodologies	Lectures, Blended Learning, Tutorial, Discussion, Presentation, Small Group Sessions

CLO	CLO1 1) Elaborate (C5) and formulate (A4) design with the organization in the real industry to sketch (P5) a new design proposal. CLO2 2) Argue (C5) the existing (A4) product design trend to measure (P5) the prospect to an improvement development. CLO3 3) Evaluate (C4) and integrate (A4) the production process flow to fix (P5) with the need of industry.

Pre-Requisite Courses	No course recommendations

Topics
1. 1. Introduction to NPD 1.1) 1.1. Definition 1.2) 1.2. Terminology
2. 2. Introduction FIVE Elements in NPD 2.1) 2.1. Concept 2.2) 2.2. Ideation 2.3) 2.3. Design 2.4) 2.4. Test 2.5) 2.5. Release
3. 3. NPD Documentation Standard 3.1) 3.1. Standard documentation design 3.2) 3.2. Design feedback and action method
4. 4. NPD Challenges 4.1) 4.1. Design Snapshots 4.2) 4.2. Product Documents
5. 5. Bill Of Material Control Planning 5.1) 5.1. Introduction 5.2) 5.2. Functions

6. 6. NPD in Production
6.1) 6.1. Production process flow
6.2) 6.2. Lab procedure
6.3) 6.3. Pilot Production
6.4) 6.4. Production

Assessment Breakdown	%
Continuous Assessment	100.00%

Details of Continuous Assessment

Assessment Type	Assessment Description	% of Total Mark	CLO
Group Project	Discussion and group assignment on introduction of NPD	30%	CLO1
Individual Project	NPD design proposal	30%	CLO2
Written Report	NPD written report	40%	CLO3

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