

Course Title: INTRODUCTION TO PRODUCT DESIGN AND DEVELOPMENT **Course Code: DS 108 (T)**

Course Background / Summary:

How do designers generate ideas? Where do ideas come from? A finished product is a combination of understanding form, function and materials, and finding ways of arriving at new possibilities in these areas. With an emphasis on the creative process within the design, the course will guide participants from an initial brief through to a finished, working product. Some of the topics covered will be created through playing with materials, three-dimensional sketch model making as part of design development, problem-solving and documenting ideas through sketches and photographs.

Course Objectives:

- To provide the basic and fundamental in product design.
- To understand the stages in the product development.
- To use three-dimensional approach in designing and development of the product.

Target Audience:

- Participants that are interested in product design and development
- Engineers and technicians that involved in product design.
- Teaching staffs (including vocational and technical teachers) who teach and interested in product design and development.

Course Duration: 3 Days

Course Contents

1.0 Introduction to Product Design

6.0 Concept Generation

2.0 Development Process and Organizing

7.0 Concept Selection

3.0 Product Planning

8.0 Concept Testing

4.0 Identifying Customer Needs

9.0 Application of Microsoft Excel and Mechanical CAD in Design

5.0 Product Specifications