



## Innovative Product Design and Development

### Objectives

This module aims at developing the following competences:

1. Put the product design and development process into practice in a systematic manner
2. Collaborate with others in the design and development of a product

### Learning Outcomes

Upon the completion of this module, the trainees will be able to:

1. Demonstrate understanding of implementing product design and development process
2. Demonstrate understanding of the utilization of product design tools and techniques
3. Participate actively in product design and development activities
4. Identify sound business opportunity by using Blue Ocean Strategy
5. Develop a suitable mission statement according to an identified business opportunity
6. Apply product design and development systematically
7. Appreciate working in a team environment

**Prerequisite:** None

### Outline:

- **Importance of Product Design and Development**
  - Introduction
  - Product Development Strategies
  - Product Design and Development Processes
- **Opportunity Identification**
  - Value Proposition
  - Blue Ocean Strategy
  - Mission Statement Creation
- **Product Concept Development**
  - Customer Need Assessment
  - Kano Questionnaire
  - Product Specifications Creation
  - Quality Function Deployment
  - Concept Generation
  - Concept Selection

### Learning Activities:

- Short lectures
- Gallery walks
- Class discussion
- Group discussion



- Group work
- Games
- Oral presentation

**Time Distribution and Study Load:**

- Training: 15hours
- Coaching: 30 hours
- Group project: 60 hours

**Assessments:**

- Class discussion and participation
- Presentations
- Group project

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