

Course Title	Course Code	Credit Hours
Product Design and Development	AE-463	3-0

Textbook:

- Karl Ulrich, Steven D. Eppinger and Maria C. Yang, “Product Design & Development”, McGraw-Hill Education

Reference Books/Materials:

- Kevin N Otto, Kristin L. Wood, “Product Design: Techniques in Reverse Engineering and New Product Development”, Pearson Education
- John Dooley, “Software Development and Professional Practice”, Apress

Course Objectives:

This course is aimed to introduce students to planning, design, and manufacturing in product creation, covering product development, customer needs, concept generation, and design for manufacturing, along with industrial design and product development economics.

Course Outline:

- Introduction to Product Development
- Development Process and Organizations
- Development Organizations
- Product Planning
- Product Planning and Execution
- Identifying Customer Needs
- Developing Product Specifications
- Concept Generation
- Concept Testing
- Product Architecture
- Industrial Design

Product Development Economics