

GEN332:PRODUCT DEVELOPMENT AND TESTING

Course Outcomes: Through this course students should be able to

- CO1 :: Develop creative and innovative skills
- CO2 :: Apply critical and analytical thinking in social and business reality
- CO3 :: Analyze and Predict and interpret trends and future scenarios
- CO4 :: Evaluate and Conceptualize, develop and communicate innovative ideas
- CO5 :: Modify, Research, built, prototype and implement projects
- CO6 :: Review and Integrate business, sustainability and innovation

List of Practicals / Experiments:

Introduction to Product Design, Prototyping, and Testing

- Overview
- The Basics
- Prototyping Levels
- The Prototyping Team

Prototyping Development Processes

- Overview
- Deep in the Process
- Gearing Up
- Evaluating Prototypes

Prototyping Physical Products

- Overview
- Project Definition
- Digital Prototyping
- Designing for the Future

Prototyping Digital Products

- Overview
- Making the Concept Acceptable
- Expanding the Team
- Reconnecting with Users
- Lessons from the Experience

Prototyping Services

- Overview
- Defining the Service
- Responding to Needs
- Developing a Successful Service

User Testing and Preparing for Production

- Overview
- User Feedback

- Before and After Production

Text Books:

1. PRODUCT DESIGN AND DEVELOPMENT by KARL ULRICH AND STEVEN D. EPPINGER, Tata McGraw Hill, India

References:

1. INTRODUCTION TO PRODUCT DESIGN AND DEVELOPMENT FOR ENGINEERS by DR. ALI JAMNIA, ROUTLEDGE

2. PRODUCT DESIGN METHODS AND PRACTICES by STOLL HENRY W., TAYLOR & FRANCIS