Integrated Product Design

2-year, Full-time, Postgraduate programme

1st year

Semester 1: Students learn about the basics of design, their elements, principles and application along with engineering drawing basics and standards, materials for product design and manufacturing processes. They explore tools and methods for creating new products, the process of product ideation and its commercialisation, entrepreneurship, start-ups and technology development. Students conduct research and learn to write proposals.

Semester 2: It introduces students to Industrial Design. They learn the fundamental principles of developing a design strategy, explore the relationship between management and design, and the meaning and nature of design strategy. Students gain an overview of fundamental concepts of Human-computer Interaction (HCI), create products based on user-centred approaches, learn about issues of epistemology, ethics and data collection methodologies in research design and conduct a systematic investigation to find solutions to real-life problems.

- Design Basics
- Engineering Fundamentals
- Product Design and Development
- Entrepreneurship and Start-ups
- Research Thinking
- Industrial Design
- Business Strategy and Design
- Design for Interaction
- Building Research

- Art, Design and Culture

2nd Year

Semester 3: Students think and implement innovative solutions to design problems using the acquired skills in the previous semesters. They learn to create a business plan including market size determination, financial planning, marketing and manpower plan, and the firm's overall strategy. They also learn to create interactive functional objects utilizing analogue, digital and electronic skill sets and explore issues in contemporary design practice. This semester helps students gain in-depth knowledge of social, cultural and technological changes that influence the development of the modern design.

Capstone Project: Students work on design projects based on real-world problems provided by our industry partners or social sector organisations. Through this project, students employ skills such as problem identification/need-finding, product design and business and put them into practice. The programme encourages students to undertake interdisciplinary teamwork for the final project.

- Product Innovation
- Business Plan
- Design of Smart Objects
- Designing Future
- Capstone Project