

# NITEC IN PRODUCT DESIGN

## Core Modules

### Design Foundation Studio

On completion of the module, students should be able to apply visual thinking, create design visualisation, perform freehand design sketching and three-dimensional rendering. This module also emphasise hands-on practices to enhance students' creative thinking abilities from working with basic lines and curves to two-dimensional sketches and thumbnails.

### Computer Aided Design

On completion of this module, students should be able to generate concepts on screen using Computer Aided Design (CAD) tools. Student will create 3D concept visualisation using CAD tools, execute and manipulate the desired outcome to convey ideas within the CAD environment.

### Digital Essentials & Corporate Styling

On completion of the module, students should be able to present and communicate design solution, apply design principles and art direction. Students will also learn presentation techniques and digital imaging, from photos editing to graphics illustration, for digital marketing campaigns.

### Materials Exploration

On completion of this module, students should be able to perform model making as a mean of design exploration. Students will learn various processes and techniques suitable for a variety of materials, to create products and models. There will be opportunities for students to lead workshops for school community.

### Design for Manufacturing & Assembly

On completion of the module, students should be able to identify different types of materials and the suitable manufacturing techniques. Students will also learn the classification and types of materials, their properties, applications and selection of these materials for product design.

### Design Studio 1

On completion of the module, students should be able to undertake group and individual projects with the aim to design, produce and market a range of objects. Students will create prototype and craft a design brief that includes feasibility study. Students are required to plan the use of materials, part drawings, production methods, sequence of finishing and graphics.

### Design Studio 2

On completion of the module, students should be able to design for businesses and apply principle of entrepreneurship. Students will also learn to use design process to create products and experiences that are relevant, in demand and commercially viable.

### Industry Attachment

Students will undergo a 3-month industry attachment or work on a design project from the industry. On completion of the module, students should be able to apply the skills and knowledge acquired to take on a range of job scope at the workplace. Students will apply the principles of product design, to conceptualise and execute a design project. Students should be able to develop concept specifications, determine finishing and materials to carry out the design, and present their work to clients confidently within the stated timelines.