

DIPLOMA IN PRODUCT DESIGN

Awarded by : Raffles College of Higher Education, Singapore
Intakes : January, April, July, and October
Duration : 6 Months (Full-time)

Core Modules

Sustainable Product Design

This module inspires the development of studies, research, and practices that deepen our theoretical understanding and spark meaningful discussions on Sustainability. It empowers students to recognize the profound implications of their work within the design environment and equips them with practical skills to execute sustainability-focused projects with conscious intent, considering the impacts at every stage of a product's lifecycle.

Students will learn how sustainable product design shapes our current and future economy. They will cultivate critical skills to grasp the essence of Sustainability and remain alert to the potential adverse effects of products throughout their lifecycle, embracing the principles of quality, environmental stewardship, safety, and social responsibility in every product development and use phase.

Credit Points: 15

Freehand Drawing

The objective of this module is to provide the students with the skills to use observation drawing as a means to express design ideas, and to familiarize students with a range of sketching and rendering techniques to further communicate these design thoughts effectively. Hands-on drawing exercises enable students to gain knowledge and confidence in their power of visualization and the development of perception and execution skills. Through observation and understanding of basic principles of structure, form, volume, space, planes, lines, perspectives, and proportions, students are encouraged to explore and experiment with various rendering skills and art media.

Credit Points: 10

Model Making

The objective of this module is to introduce students to Model Making exploration, understanding the variety of materials and their properties applied to a range of processes relevant to two and three dimensional design and construction. These techniques aim to develop accuracy and constructive imagination. Students will develop awareness in structural conceptualization and visual output of the models executed. Discussion and critical appraisal will be essential adjuncts to observation, concept and practice development.

Credit Points: 10



2D CAD Technical Drawing

This module is designed to facilitate the learning and acquisition of competencies related to the regulation of technical drawing and is aligned with international standards. It aims to equip students with the skills to articulate technical content and methodologies pertinent to project execution. Moreover, students will develop proficiency in creating computer-aided mechanical drawings using engineering CAD software, focusing on 2D drafting and detailing, enabling them to implement projects effectively. In addition, the curriculum includes the study of methods and projection tools aimed at identifying needs, planning, monitoring, and executing projects. This knowledge will empower students to utilise their drawings as practical means of technical communication.

Credit Points: 10

Design Impact

In this module, students will embark on an inspiring journey through diverse methodologies that enhance conceptualization and creativity. They will learn to apply concepts to data, uncovering patterns that pave the way for innovative and impactful design solutions shaped by technology, visuals, language, cultural trends, and market research. This exploration will enrich their understanding of the essence and definitions of these concepts. Students will dive into two transformative approaches: Multivariate Typology and Canonical Typology. These powerful techniques will empower them to craft mind maps illuminating ideas' connections. By embracing design thinking techniques, students will unlock their potential to generate compelling design solutions centred on topics that resonate with words and images, associations, inspirations, concept generation, shapes, and forms.

Credit Points: 15

Cultural Studies

The objective of this module is to provide students with the knowledge and skills to understand and appreciate architecture and visual arts. The ultimate goal is to help students consider and analyze the inherent interaction between art and social and cultural values, to develop critical thinking abilities, and a greater awareness and understanding of design.

Credit Points: 10

Colour Application in Design

The objective of this module is to provide the students with knowledge and skills to understand and apply basic principles of colour theory into design related projects. The module's emphasis is on the study and visual phenomena of colour from conceptualization to the application to specific design areas. In this module, students will learn colour perception, harmony strategies, specification, colour scheme mixing, colour history, composition principles, and practise through successful creative designs.

Credit Points: 10



Design Thinking

The module introduces students to fundamental concepts and approaches in solving visual design challenges. The core study encompasses the classic three-step Creative Problem Solving process, as well as the more human-centric form of Design Thinking methodology. With emphasis on the creative process, students will be guided to explore the important stages in the development of effective design solutions involving creativity. The guidance will take the form of lectures, demonstrations, practicals, and critique sessions. The components of the module include problem defining, visual research basics, creativity tools and techniques, prototyping and evaluation, etc.

Credit Points: 10