

ADVANCED DIPLOMA IN PRODUCT DESIGN

Awarded by : Raffles Singapore

Intakes : January, April, July, and October

Duration : 1 Year and 6 months (Full-time)

Core Modules

3D Conceptualisation	<p>During this module students will learn that sometimes an abstract or seemingly irregular thought pattern can lead to a unique and appropriate design solution. Sometimes that process can be influenced by a single or a number of factors including; technology, visuals, Words, Cultural trends and market research. During this module students will undertake one project using several thinking techniques to help understand and create design solutions determined by those topics referencing; word & Image associations, inspirations, concept generations, and forms. Students will also evaluate some iconic products to gain an understanding as to their unique origins.</p> <p>Credit Points: 10</p>
3D Manipulation (3D Studio Max)	<p>Using the software 3D Studio Max, students will be trained to use wide variety of techniques of virtual representation of concepts. Students will gain knowledge and skills in three dimensional rendering through generation a support for the presentation and demonstration of some kind of animation.</p> <p>Credit Points: 10</p>
Academic Research and Communication Skills	<p>This unit covers key aspects of research and communication studies in academic contexts relevant to students of design and marketing. Students engage in collaborative learning activities throughout the term in order to develop their teamwork skills. Students learn to locate, understand and critically evaluate information from books, journals, the Internet and primary sources in order to do effective research. Using these sources of information, students then produce an extended piece of analytical writing and give oral presentations to their peers. Skills in doing primary research (i.e. conducting focus groups and surveys), accessing and evaluating information, paraphrasing, using established referencing systems, applying the principles</p>

	<p>of effective communication and the professional presentation of documents are all covered during the module.</p> <p>Credit Points: 10</p>
Computer Aided Design (AutoCAD)	<p>Students will learn the applications and processes of AutoCAD software based on 2D drafting, detailing and 3D applications and their relevance within 3D Design through realize in a series of studio exercises. A strong emphasis will be placed on ascertaining that all students proceed at the same pace in a computer lab environment.</p> <p>Credit Points: 10</p>
Computer Rendering (Rhinoceros)	<p>Students will learn the applications and processes of Rhinoceros software based on free form 3D modeling and computer rendering. Students will be introduced to the principles of NURBS geometry which can be used to create curves, surfaces and solids within 3D design.</p> <p>Credit Points: 10</p>
Design Management	<p>To prepare student for an internship as such student need to be equipped with a well laid out portfolio, website, interview session, resume and curriculum vitae. Student need to understand the importance of professional practice including areas of project management, intellectual property, legal aspects, meeting procedures, client management and documentation procedures.</p> <p>Credit Points: 10</p>
Design Rendering	<p>Students are exposed to different rendering skills and using different types of medium to render the final work. Through rendering students are able to demonstrate their thought and ideas clearly to the respective client or lectures. This skill will enhance students' confidence and develop oneself as a professional designer. Students will be exposed to a range of drawing style using different medium such as pencil colour, water colour, pastel, marker To illustrate commercial drawing in jewelry Designing or product designing.</p> <p>Credit Points: 10</p>
Digital Presentation	<p>Exploring the applications of digital photography and software, through capture and manipulate images and the use of the application to generate 2D presentation.</p>

	Credit Points: 10
Human Factors	<p>Through this subject, student will critically analyze the importance of user scenario. Considering the user as the main aim. This will allow student to critically consider the importance of size, weight as well as the comfort of the user. This module also examines the use of anthropometrical and ergonomic data in 3D design. This includes understanding the psychology of consumer behavior and identifying user needs through analyzing the role of the consumer in a contemporary and historical context by examining economic, social, commercial, and gender topics.</p> <p>Credit Points: 5</p>
Major Design Project - Product Design	<p>This final project will be self-proposed, from previous projects undertaken throughout the year and developed through to pre-production stage, under the supervision and guidance of the studio lecturer.</p> <p>Credit Points: 15</p>
Manufacturing Technology	<p>Students are given opportunity to Analyse and investigate a range of manufacturing processes (one-off and mass production) through lectures, discussion and visits to industry. They will be guided to have broader knowledge and understanding of the constraints of specific processes and its application within 3D Design.</p> <p>Credit Points: 10</p>
Retail Visual Merchandising	<p>Retail Visual Merchandising is the art of displaying merchandise that appeal to the eyes of the customer. It sets the context of the merchandise in an aesthetically pleasing fashion, presenting them in a way that would convert the window shoppers into prospects and eventually buyers of the product. Designer need to have the knowledge for display and exhibit products, for promoting and increase sales. This course will allow students to be able to understand the importance of visual merchandising as a designer in the current market situation where display / visual merchandising is a required skill. This module is to help students to be able to apply visual merchandizing technique and help students to prepare them with different scenario while working in the industry. Students are usually required to do this task when working, to create the new window display for different season. For example Mother's DAY, Valentine's Day, Christmas etc. The purpose is to promote company's NEW collection so AS TO attract customer. Through display this will enhance company's revenue.</p> <p>Credit Points: 10</p>

Solid Modeling - Rapid Prototyping	<p>Solid Modeling emphasises understanding of the designer's approach towards presentation of design solutions in a three-dimensional form. In this module, students will be introduced to various types of rapid prototyping processes and 3D mechanical design applications.</p> <p>Credit Points: 10</p>
Studio Practice: Electrical Product Design	<p>Electrical Product Design emphasizes on examining consumer product for Industry through testing and analyzing a range of Electrical & Electronic products within a creative, commercial and highly competitive consumer market. In this module, students will be introduced to the internal components, structural and materials relating to electrical and electronic product design.</p> <p>Credit Points: 15</p>
Studio Practice: Furniture Design - Recycling	<p>Furniture Design emphasizes on exploring sustainability material regarding to the furniture design from beginning to end in the investigation of various design methodologies, conceptualization approaches and problem-solving mechanisms resulting in practical design solutions. In this module, students will be taught through hand-on experience how to shape and construct furniture.</p> <p>Credit Points: 15</p>
Studio Practice Modular Design Systems	<p>Students will learn the applications and processes of modular design system and the different applications in the industry. They will be guided on the various approaches and better use of different tools to products.</p> <p>Credit Points: 15</p>
Studio Practice: Packaging Design	<p>In Packaging Design the student explore the fundamental of the packaging, considering and designing in three dimensions; mass design, designing for specific target markets, food containers and new product launches, as well as techniques on creating packaging. Also learn the function of wrap to protect the product; creating identity for advertising as well as to communicate to the consumers.</p> <p>Credit Points: 15</p>

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Industrial Attachment	<p>This module aims to provide students with the opportunity to gain real-world industry experiences and professional practices in their chosen discipline. It allows students to establish connections, develop useful contacts, and gain industrial skills and an overall perspective of the discipline. The industrial attachment is intended to enhance students' educational experience and prepare them for their careers.</p> <p>Credit Points: 20</p>
Industry and Community Engagement	<p>In this module, students are required to use their design knowledge and skills in industry-focused and/or community-based projects. These projects are facilitated by the lecturer or tutor, and there will be interactions with and feedback from key industry/community project mentors. The module is intended to prepare students for the expectations of the fast-paced real-world industry, and professional practices in careers in their chosen discipline.</p> <p>Credit Points: 20</p>