# ADVANCED DIPLOMA IN
# JEWELLERY DESIGN

**Awarded by** : Raffles College of Higher Education, Singapore
**Intakes** : January, April, July, and October
**Duration** : 1 Year and 6 Months (Full-time)

## Core Modules

### Digital Presentation

The objective of this module is to provide students with general knowledge of digital presentation theories, planning, applications, and designs, as well as practical methods and practical skills for creating digital presentations. Students will be able to identify different methodologies and tools for presenting their ideas digitally as well as apply the appropriate digital medium for the generation of design ideas, thereby grasping the skills needed to prepare and deliver effective and meaningful presentations.

Credit Points: 10

### Computer Aided Design (AutoCAD)

This module teaches students to produce computer-aided mechanical drawings, providing them with the necessary knowledge in engineering CAD Software drawing, based on 2D drafting, detailing, and 3D applications and their relevance within 3D Design, with a strong emphasis on the standards in technical drawings, specifications, interpreting and preparation of the drawing output (plotting).

Credit Points: 15

### Human Factors

Through this subject, students will critically analyze the importance of user scenario. It will allow students to critically consider the importance of size, weight, as well as the comfort of the user. This module also examines the use of anthropological and ergonomic data in Product Design including understanding the psychology of consumer behaviour 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.

Credit Points: 5

### Studio Practice: Fabrication Methods 3

Students will be exposed to a range of fabricating methods, such as Repousse, Dye forming, Reticulation, Texturing and Granulation. Using metal sheets to create different forms and applying these forms into a series of work. Students will be exposed to a new material, Resin and its own working process.

Credit Points: 15

## 3D Conceptualisation

In this module, students will learn the different methodologies for better conceptualization, including applying concepts to data, through the patterns that can lead to a unique and appropriate design solution, influenced by factors such as technology, visuals, words, cultural trends, and market research. Students become conscious of what concepts mean and how they are defined.

Students will be taught two different approaches – Multivariate Typology and Canonical Typology – for establishing a mind map as a potential associated outcome of ideas, using several design thinking techniques to understand and create design solutions for determining topics, referencing of the following: words and images, associations, inspirations, concept generations, shape, and forms.

Credit Points: 15

## Design Rendering

Students are exposed to different rendering skills and will use different types of mediums to render the final work. Through rendering, students are able to demonstrate their thoughts and ideas clearly to clients or lecturers. This skill will enhance students' confidence and develop them as professional designers in terms of improving accurate communication, live freehand drawing, and discussion of ideas and concepts to develop.

Credit Points: 15

## Studio Practice: Enamelling and Glass

Students will be exposed to Glass in different form such as Enamelling and contemporary applications in Glass, further expanding knowledge in material applications within jewellery design. Students will explore the different types of glass sheets, rods as well as powder form glass. The techniques help students to understand how glass and enamel can be used as part of a jewellery.

Credit Points: 15

## Academic Research and Communication Skills

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 interviews and surveys), accessing and evaluating information, paraphrasing, using established referencing systems, applying the principles of effective communication, and the professional presentation of documents, are all covered during the module.

Credit Points: 15

## Retail Visual Merchandising

Students will be taught both design theory and software applications to create concepts for aesthetically pleasing and attractive promotion of projects. They will explore the nature, languages, and values of the contemporary design scene and analyze the new aesthetic and behavioral trends in the marketplace, with the factors that determine the economic performance of a brand or company, and translate these values into personal and holistic projects that are attractive to the consumers.

Students will also learn how to convey unique brand values and identity through powerful storytelling to create an appealing visual language through photo and video shootings, visual merchandising strategies for window and in-store displays.

Credit Points: 15

## Jewellery Technology

Analysis and investigation of a range of manufacturing processes (one-off and mass production) through visits to industry, will broaden knowledge and understanding of the constraints of specific processes and their applications within jewellery design.

With the current technology students could explore more on printing of jewellery pieces as well as casting it directly into silver pieces.

Credit Points: 15

## Studio Practice: Silversmithing

Students will be introduced to specific processes such as Anticlastic and Married Metals which include, Mokume Gane, Kumboo and Inlay. Students are to use Fabrication Methods 1, 2 and 3 to guide students' creativity to create a series of work applying it into silversmithing module. Students will be exposed to various design influences, conceptual ideas and practical solutions relating to contemporary.

Credit Points: 15

## Developing Fashion

This module will offer the knowledge and skills through practical exercises and examples, to enable students to develop ideas from fundamental research, concept, and processes that explore design in order to communicate these ideas into developing fashion and collections.

Credit Points: 15

## Solid Modeling – Rapid Prototyping

Solid Modeling emphasizes the understanding of the designer's approach towards the 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, sectioning, and dimensioning; drawing standards and geometrical tolerances.

Credit Points: 15

## Design Management

To prepare students for the real-world industry, students are taught the necessary skills for communication of their portfolio, website, interview session, resume, and curriculum vitae. In this module, the dialogue and research is a crucial factor to assemble a good collection of techniques that will help them in the professional environment. Students need to understand the importance of professional practice, including areas of project management, intellectual property, legal aspects, meeting procedures, client management, market and user research. This module provides Product Designers an insight into how to manage a project while appreciating the roles of design as well as the designer in projects. It covers the concept of design for value, integrated design, the client's brief, design evaluation, and the impact of design.

Credit Points: 15

## Gemstones Identification

Identification of gemstones will allow students to have a broader knowledge when designing and demonstrating a good understanding of precious and semi precious stones used in the commercial industry. Students are exposed to all types of gemstones that are commonly used in the market.

Credit Points: 15

## Computer Rendering (Rhinoceros)

Students will learn applications and processes in computer rendering, designing and engineering products ranging from jewellery and furniture to automobiles, and how to build 3D models and prototypes with the NURBS-based modeling tools. Students are introduced to three primary entities (the curve, the surface, and the solid) and shown the best ways to draw curves and model 3D objects, to edit their geometry efficiently, and to render and export designs.

Credit Points: 15

## Industrial Attachment

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.

Credit Points: 20

## Industry and Community Engagement

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.

Credit Points: 20

**Studio Practice: Gem Analysis and Stone Setting**

Students will be exposed to a range of Stone setting methods and Gem analysis – including classifications and identification processes of precious and semi-precious stones, further enhancing their main area of study.

Credit Points: 20

**Major Design Project – Jewellery Design**

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 a studio lecturer.

Credit Points: 20