



香港科技大學
THE HONG KONG
UNIVERSITY OF SCIENCE
AND TECHNOLOGY

Division of Integrative Systems and Design

ISDN4000U

Design with 3D Visual Communication Technologies

Instructors: Larry Koo and Mitch Li

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Design with 3D Visual Communication Technologies

Course Vector: 3

Course Description:

This course covers 3D visual communication technologies from modeling and rendering to animation. Through practical examples from industrial design, students will understand the latest 3D modeling, animating, rigging, and rendering techniques. The course emphasizes a design-focused approach to help students create attractive and aesthetically pleasing digital portfolios. Students will learn through project-based learning, allowing them to apply their skills in realistic scenarios.

Course Learning Outcomes:

At the completion of the course you will be able:

1. To understand the steps to create 3D design & animation through product design principles
2. To master the necessary digital skills for 3D content creation
3. To apply knowledge of modern aesthetics and industrial design into practical 3D animation

Grading:

Presentation 70%
Learning portfolio 10%
Course Participation 20%

100%

Course outline:

Week	Description
1	Introduction to "Design with 3D Visual Communication Technologies"
2	Industrial Design & 3D Communication
3	Proposal presentation
4	Digital Modelling 1
5	Digital Modelling 2
6	Rendering – Still Composition
7	Lighting & Camera
8	Mid-Term Presentation
9	Motion Graphics
10	Materials and mapping
11	Rigging
12	Particle System, Clones and Arrays
13	Final Presentation