

# COURSE MODULES **GAME ENGINEERING**

## General Courses

Psychology for Digital Media  
Introduction to  
3D Computer Animation Production

## Programming Courses

Introduction to Computer  
and Programming  
High Level Programming Lab  
Object-Oriented Programming  
Computer Organization and  
Architecture  
Advance Programming  
Fundamentals of Mathematics  
for Computer Graphics

## ADV Computer Science Courses

Image Processing  
Introduction to Databases  
Introduction to 3D Production  
for Designers  
Software Engineering  
Introduction to interactive  
sound synthesis

## Game Design Courses

Theory and Principles of  
Game Design 1  
Theory and Principles of  
Game Design 2  
Game Prototype  
Game Spaces and Camera Design  
Graphic & User Experience Design  
2D and 3D Game Design

## Math and Physics Courses

Fundamentals of Mathematics  
for Computer Graphics  
Applied Calculus and  
Analytic Geometry 1  
Applied Calculus and  
Analytic Geometry 2  
Linear Algebra  
Motion Dynamics

## Computer Science Courses

Data structure  
Operating System  
Discrete Structure  
Design and Analysis of Algorithms  
AI for Game

## Computer Graphic Courses

Introduction to Computer Graphics  
Physical Simulation for  
Computer Graphic

## PROJECTS

Project Introduction  
Project  
Advance Project 1  
Advance Project 2  
Special Topic 1  
Special Topic 2  
Special Topic 3

\*These modules are subject to be modified according to the TQF2.  
However, the learning outcome of each module will be according to what is listed above.

\*\*The modules presented above is still yet to include the compulsory KMUTT General Education courses.

# DIGITAL TECHNOLOGY