## Overview

The School of Systems and Technology (SST) at the University of Management and Technology (UMT) aims to offer new programs to meet the needs of industry and academia. Our programs attract young and talented students by offering them knowledge and skillset that enable them to meet today’s challenges and become technology leaders in the future. The school strives to create an environment that grooms the students by imparting best available theoretical knowledge complemented with rigorous practical work. The school encourages faculty members and students to undertake state-of-the-art research and engage in collaborative work with industry.

This 4-year computing degree program will provide a strong foundation to students in game design and development techniques. School will provide students a foundation of traditional drawing, illustration and art courses to make way for 2-D and 3-D animation, storytelling, character development, audio and game technology knowledge. Students will also become familiar with modern industry tools and technologies for graphic design, animations and multimedia. In addition, rigorous computer programming will be an integral part of this program. Finally, students will become capable to design, develop and deploy complete multi-user multi-platform games. Students taking this program are strongly encouraged to do an internship to their curriculum, which will give them real world experience to understand the working of gaming industry. In order to bridge the industry-academia gap, students will be encouraged to do their final year projects with industry collaboration.

**Careers** for those with bachelor’s degrees in game design and development include mainly the fields of the video game industry but are not limited to these. Career options include Game developer, Game designer, Graphics designer, 3-D artist and Animation Engineer, Software developer, IT expert, Mobile app developer, etc.

## Aims of The Program

## Vision

The vision for our program is to impart the knowledge and training which will enable students to harmonize theory with practice, concept with application, and problem with solution. And to prepare them to apply engineering principles and best practices, as well as implement processes required to design, develop, deploy, and maintain high quality video games. Our vision also includes the development of student’s ethical values, as well as professional and interpersonal skills. It will help the students to work synergistically in team environments. The program will also strive to develop a capacity for innovation and a passion for lifelong learning.

## Mission

Mission of program is to produce professionals who have a mastery of principles, theory, practices, and processes necessary for designing and producing good quality games which are engaging games with a high marketability potential.

# Objectives

By the end of this program, the student will be able to:

* Apply techniques and methods in the production of a diverse portfolio of industry-standard game-art animation assets, game prototypes and documents.
* Apply the appropriate skills necessary for proper project production planning and management of computer and video games.
* Deploy a comprehensive knowledge of the historical, cultural, sociological and psychological aspects of computer games to engage with an audience.
* Lead, or participate in an interdisciplinary team-oriented game production project.
* Engage with gaming industry best practices to enable and entrepreneurial position in the gaming marketplace.
* Utilize the basic principles of computer science, software engineering, mathematics, physics and other technical skills necessary for the design of computer games.
* Develop game design solutions having significant theoretical, narrative, perceptual and aesthetic coherence.
* Evaluate the degree to which a game can be intuitively engaged by a user.
* Manage the production of a computer game, allocating resources and developing an effective and efficient schedule, budget and milestone plan to develop the game.
* Communicate orally, graphically and in writing, employing the professional skills and techniques used in the design, development and documentation of computer games.
* The development of critical thinking and quantitative reasoning.

**Admission Requirements**

The minimum requirements for admission in a bachelor degree program in this computing program is any of following:

At least 50% marks in Intermediate (HSSC) examination with Mathematics or equivalent qualification with Mathematics, certified by IBCC.

**OR**

At least 50% marks in Intermediate (HSSC) examination with Pre-Medical or equivalent qualification, certified by IBCC.

Deficiency***:***

“Students with pre-medical, must have to pass deficiency courses of Mathematics of 6 credit hours in first two semesters.*”*

**Duration**

The minimum duration for completion of BS (GDD) degree is four years. The HEC allows a maximum period of seven years to complete BS degree requirements.

**Degree Completion Requirements**

To become eligible for award of BS (GDD) degree, a student must satisfy the following requirements:

Must have studied and passed the prescribed courses, totaling 132 credit hours.

Must have earned CGPA (Cumulative Grade Point Average) of at least 2.0 on a scale of 4.0.