



# Gamification in Healthcare driven by AI, IOT and VR

**2 & 3 October 2024 | 9.00 am –5.30 pm**

## INTRODUCTION

This comprehensive course is designed to furnish participants with essential skills in leveraging gamification, artificial intelligence (AI), and the Internet of Things (IoT) technology in healthcare. Participants will gain a profound understanding of these emergent technologies and develop the expertise to construct an interactive rehabilitation game employing smart technologies.

Through intensive hands-on sessions, participants will learn the process of data acquisition using IoT sensors. The course will guide them through the utilization of cloud platforms for secure data storage and instruct on the integration of Virtual Reality (VR) for remote visualization and monitoring of patient progress, fostering a disciplined and serious approach to healthcare applications.

A key emphasis will be placed on cultivating the ability to discern trends through data analytics and AI, with the ultimate goal of enhancing patient care. This course is for serious practitioners who are keen to understand and implement new technologies in healthcare.

## TARGET AUDIENCE

Healthcare Professionals

## LEARNING OBJECTIVES

- Explain the use of game technology in healthcare training
- Develop an interactive Rehab Game using VR and IoT
- Manage data acquired from the IoT sensors
- Perform remote monitoring and trends analysis through Data Visualization

## COURSE FEES

*Course fees inclusive of GST (9%) for 2024*

Full course fee	\$654.00
Singapore Citizens (SCs) and Permanent Residents (PRs)	\$196.20
SCs aged $\geq 40$ years old (SkillsFuture Mid-career Enhanced Subsidy)	\$76.20

## TRAINING DATES / VENUE

Venue: Temasek Polytechnic Campus  
(Exact venue will be provided nearer to date)

## REGISTRATION

Please email SIMS at [sims.sssc@singhealth.com.sg](mailto:sims.sssc@singhealth.com.sg) to register interest



## PROGRAMME

Time	Programme
<b>Day 1</b>	
0900 – 0915	Registration
0915 – 1045	<b>Introduction</b> Overview on the use of Game Technology in Training Comparisons of Media used in training
1045 – 1100	Tea Break
1100 – 1230	<b>Gamification in Healthcare:</b> Demonstration of use of a VR app in Healthcare
1230 – 1330	Lunch
1330 – 1500	<b>Developing the Healthcare Game using VR:</b> Introduction to VR app Development Platform
1500 – 1515	Tea Break
1515 – 1645	<b>Making the game interactive with IoT Data and AI:</b> Introduction of IoT Data and AI in VR App
1645 – 1715	<b>Overall System Design</b>
1715 – 1730	Summary & Conclusions

Time	Programme
<b>Day 2</b>	
0900 – 1045	<b>Supporting Rehab Games:</b> Case Study: Physiotherapy and Games
1045 – 1100	Tea Break
1100 – 1230	<b>Enhancing Rehab using AI with Smart Technology:</b> Measuring activity parameters using Smart Sensors Linking activity Data to the Game in Real-Time and training AI model
1230 – 1330	Lunch
1330 – 1500	<b>Collecting activity data using Cloud Platform:</b> Collecting Measurement Data on Cloud for Remote Monitoring
1500 – 1515	Tea Break
1515 – 1600	<b>Enabling Remote Monitoring of Patients' Progress using Smart Technology:</b> Remote Monitoring, Studying Trends through Data Visualization and AI
1600 – 1630	<b>Overall System Design</b>
1630 – 1730	Summary & Conclusions <b>Quiz</b>

