

SM1103A: INTRODUCTION TO MEDIA COMPUTING

Effective Term

Semester A 2025/26

Part I Course Overview

Course Title

Introduction to Media Computing

Subject Code

SM - School of Creative Media

Course Number

1103A

Academic Unit

School of Creative Media (SM)

College/School

School of Creative Media (SM)

Course Duration

One Semester

Credit Units

3

Level

B1, B2, B3, B4 - Bachelor's Degree

Medium of Instruction

English

Medium of Assessment

English

Prerequisites

Nil

Precursors

Nil

Equivalent Courses

Nil

Exclusive Courses

CS1103B Media Computing

Part II Course Details

Abstract

This course introduces fundamental concepts of computational thinking and creative coding through hands-on projects and artistic exploration. Moving away from traditional text-based programming, students will engage with visual programming paradigms to build interactive media artworks. The curriculum emphasizes experimentation, creative expression, and the development of foundational skills for designing dynamic and responsive digital experiences. Students will explore workflows for creating visual art, animation, audio-reactive installations, and interactive interfaces, paving the way for more advanced computational media practices.

Course Intended Learning Outcomes (CILOs)

CILOs		Weighting (if app.)	DEC-A1	DEC-A2	DEC-A3
1	Understand foundational concepts of computational thinking and visual programming.		x	x	
2	Apply visual programming techniques to create dynamic visual art, animation, and interactive media.		x	x	x
3	Develop basic interactive experiences using various input methods and user controls.		x	x	x
4	Cultivate problem-solving skills through iterative design, resourcefulness, and experimentation within creative contexts.		x	x	

A1: Attitude

Develop an attitude of discovery/innovation/creativity, as demonstrated by students possessing a strong sense of curiosity, asking questions actively, challenging assumptions or engaging in inquiry together with teachers.

A2: Ability

Develop the ability/skill needed to discover/innovate/create, as demonstrated by students possessing critical thinking skills to assess ideas, acquiring research skills, synthesizing knowledge across disciplines or applying academic knowledge to real-life problems.

A3: Accomplishments

Demonstrate accomplishment of discovery/innovation/creativity through producing /constructing creative works/new artefacts, effective solutions to real-life problems or new processes.

Learning and Teaching Activities (LTAs)

LTAs		Brief Description	CILO No.	Hours/week (if applicable)
1	Lectures/Workshops	Introduce core concepts, workflows, and artistic examples. Explore various tools and techniques for interactive media creation. Online resources will be provided for out-of-classroom exploration and learning.	1, 2, 3, 4	

2	Guided In-Class Exercises	Hands-on practice with practical examples and templates. Students will apply learned concepts in a guided, supportive environment.	2, 3, 4	
3	Assignments/Individual project/Final project	Creative assignments and mini-project designed to reinforce learned skills and encourage artistic experimentation. Focus on creative expression and exploration over technical perfection.	2, 3, 4	
4	Critique Sessions	Dedicated time for (randomly) selected students to share their work, receive constructive feedback from peers and instructors, and engage in discussions about creative processes and outcomes. *Make sure each student will be selected at least once to share his/her work and receive feedback.	2, 3, 4	

Assessment Tasks / Activities (ATs)

ATs		CILO No.	Weighting (%)	Remarks ("- " for nil entry)	Allow Use of GenAI?
1	Assignments/ Individual project/ Small group project	1, 2, 3, 4	100	-	Yes

Continuous Assessment (%)

100

Examination (%)

0

Assessment Rubrics (AR)**Assessment Task**

1. Individual project and Group project

Criterion

ABILITY to UNDERSTAND and APPLY fundamental visual computing concepts to the context of media computing

Excellent (A+, A, A-)

High

Good (B+, B, B-)

Significant

Fair (C+, C, C-)

Moderate

Marginal (D)

Basic

Failure (F)

Not even reaching marginal levels

Assessment Task

2. Assignments

Criterion

- ABILITY to APPLY learnt knowledge for creative media
- CAPACITY for knowledge and creativity in applying and implementing media computing technologies

Excellent (A+, A, A-)

High

Good (B+, B, B-)

Significant

Fair (C+, C, C-)

Moderate

Marginal (D)

Basic

Failure (F)

Not even reaching marginal levels

Additional Information for AR

All A+/A/A- grade assignment should comply with the highest performance of Discovery-oriented learning.

Part III Other Information

Keyword Syllabus

- Computational Thinking & Visual Programming
- Interactive Media Art Fundamentals
- Node-based Workflows
- Generative Art Principles
- Animation & Motion Graphics
- Audio-Visual Integration
- User Interface (UI) Design for Interactive Art
- Basic Interaction Design
- Creative Coding Techniques

Reading List

Compulsory Readings

Title	
1	Nil

Additional Readings

Title	
1	Reas, C., McWilliams, C., & LUST. (Eds.). (2012). Form+Code in Design, Art, and Architecture. Princeton Architectural Press.
2	Tribe, M., & Jana, R. (2006). New Media Art. Taschen.
3	Dan Saffer (2010). Designing for Interaction: Creating Innovative Applications and Devices. New Riders, 2nd edition