# COMP110 Principles of Computing



20 credits Compulsory for BSc Computing for Games

## Introduction

This module is designed to introduce you to the basic principles of computing in the context of digital games. It is designed to complement the other modules, providing a broad foundation on the theories, methods, models, and techniques in computing which will help you to construct computer programs and be able to make use of relevant scholarly sources.

## Aims

#### This module aims to help you:

- Understand the basic principles, terminology, roles, and software development concept that computing professionals apply within a game development context
- Understand how to apply computing theory to practical programming activities
- Understand how to conduct basic software development tasks

## Learning Outcomes

LO	Learning Outcomes	Assessment Criteria
1	Show a basic understanding of creative computing solutions using professional techniques	Demonstrate a basic understanding of comput- ing fundamentals. Apply basic knowledge and understanding of the techniques used in soft- ware development. Understand the creative value of maker-style and iterative approaches for the generation of innovation.
2	Show a basic understanding of how to com- municate effectively with stakeholders in writ- ing, verbally and through adherence to coding standards	Show a basic understanding of how to com- municate effectively with stakeholders in writ- ing, verbally, and through adherence to coding standards. Annotate software to communicate with others effectively.
3	Show a basic development of the ability to re- flect critically on and evaluate working methods and solutions	Analyse critically the strengths and weaknesses of code and develop an ability to respond to the critical judgements of others.
4	Show a basic understanding of the ability to conduct research, present knowledge in an academic format and apply that research to practice	Research and explain the use of methodologies used in computing, apply knowledge to practice, and present that knowledge where appropriate in an academic format.
6	Show a basic understanding of methods used to help set goals, manage workloads to meet deadlines and to work collaboratively	Set goals and manage workloads to meet deadlines using set methodologies and present ideas in a variety of situations with appropriate support.

## Overview

Module Leader	Dr Edward Powley	
Academic Staff	Dr Michael Scott	
Assignments	Worksheet Tasks	80%
	Research Journal	20%
Indicative Hours	Sessions	36-hours
	Directed Reading	18-hours
	Worksheet Tasks	56-hours
	Research Journals	14-hours
	Self-Directed Computing Study	36-hours
	Self-Directed Portfolio Development	40-hours

Each study block represents 600-hours of study. This means that 40 hours of study per week (including contact time) is expected, alongside a further 120-hours of studio practice across the assessment period.

## Additional Resources

#### Session Plans & Materials:

http://learningspace.falmouth.ac.uk/

#### Assignment Briefs:

https://github.com/Falmouth-Games-Academy/bsc-assignment-briefs

#### Reading List:

http://resourcelists.falmouth.ac.uk/index.html