

COMP110

Principles of Computing



20 credits
Compulsory for BSc Computing for Games
Dr Edward Powley

Introduction

This module introduces 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

| LO | Learning Outcomes | Assessment Criteria |
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| 1 | Show a basic understanding of creative computing solutions using professional techniques. | Demonstrate a basic understanding of computing fundamentals. Apply basic knowledge and understanding of the techniques used in software development. Understand the creative value of maker-style and iterative approaches for the generation of innovation. |
| 2 | Show a basic understanding of how to communicate effectively with stakeholders in writing, verbally and through adherence to coding standards. | Show a basic understanding of how to communicate effectively with stakeholders in writing, verbally, and through adherence to coding standards. Annotate software to communicate with others effectively. |
| 3 | Show a basic development of the ability to reflect 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. |

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| Academic Staff | Dr Edward Powley Dr Michael Scott (Moderator) | |
| Assignments | Worksheet Tasks | 80% |
| | Research Journal | 20% |
| Indicative Hours | Sessions | 36 hours |
| | Directed Reading | 18 hours |
| | Worksheet Tasks | 56 hours |
| | Research Journal | 14 hours |
| | Self-Directed Study | 36 hours |
| | Self-Directed Studio Practice | 40 hours |
| | | 200 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/course/view.php?id=1249>

Assignment Briefs:

<http://github.com/falmouth-games-academy/bsc-assignment-briefs/tree/2017-18/comp110>

Reading List:

<http://resourcelists.falmouth.ac.uk/modules/comp110>