# UNIVERSITY OF NORTHAMPTON

# MODULE SPECIFICATION

This document forms the definitive overview as to the nature and scope of this module and is used in the University’s quality assurance processes. The information in this document cannot be changed without approval (except for the Indicative Content).

[A glossary of key terms is available.](https://www.northampton.ac.uk/ilt/current-projects/defining-contact-time/types-of-student-contact-time/)

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| **FACULTY** | Faculty of Art, Science & Technology |
| **SUBJECT AREA** | Technology |
| **SUBJECT FIELD** | Computing |
| **MODULE TITLE** | Software Engineering Fundamentals |

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| **MODULE CODE** | CSY1064 |
| **LEVEL** | 4 |
| **CREDIT VALUE** | 20 |
| **MODULE LEADER** | Dr Mark Johnson |

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| **DELIVERY MODE(S)** | Standard |
| **DELIVERY LOCATION(S)** | UON |

**PRE-REQUISITES\*:**

None

**CO-REQUISITES\*:**

None

**RESTRICTIONS\*:**

None

**SUPPLEMENTARY REGULATIONS**\*:

This module has no supplementary regulations

**MODULE OVERVIEW:**

The purpose of this module is to develop student's experience with the multiple stages of software engineering life-cycles from initial need and requirements identification through to the design and implementation of code in order to develop confidence in the use of terminology and techniques for each of the stages.

**INDICATIVE CONTENT:**

* Introduction to Software Engineering lifecycle
* Problem Domain investigation
* Requirements Elicitation
* Interview Techniques
* System Analysis and Design
* Variables
* naming convention
* operator
* objects
* properties
* functions
* Introduction to Classes and Objects.

**LEARNING OUTCOMES:**

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| **Module Learning Outcome** |
| **On successful completion of the module with detailed guidance students will be able to:** |
| **Subject-Specific Knowledge, Understanding & Application** |
| 1. explain he different phases of software engineering lifecycle; |
| 1. analyse a problem domain, elicit software requirements and use suitable design techniques to produce specification; |
| 1. conceptualise the components of a high-level programming language; |
| 1. use suitable programming language constructs to solve problems at a design level; |
| **Changemaker & Employability Skills** |
| 1. deliver a presentation to convey the benefits of the specifications and designs produced; |
| 1. develop the skills to analyse and implement solutions to problems. |

**TYPICAL LEARNING, TEACHING AND ASSESSMENT HOURS (for the module as delivered on-site at the University of Northampton):**

[View this table on how learning, teaching and assessment hours map to the KIS Categories.](https://www.northampton.ac.uk/ilt/current-projects/defining-contact-time/kis-guidance/)

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| **Learning and teaching information for this module when delivered off-site by UN partners is available from the partner institution’s NILE site (or equivalent). Any variation in study hours must be approved by the University of Northampton before students are enrolled, ensuring that study hours provision is always appropriate to support student achievement of the module learning outcomes.** | |
| **Learning, Teaching and Assessment activities** | **Study hours** |
| **Contact hours: (total)**  Comprising face-to-face and online contact hours as follows: | **48** |
| * **Face-to-face (total) -** this may include the following:   Specialist space (e.g. laboratories, studio space) | 36 |
| * **Online contact hours** **(total)**  (comprising online activities with mediated tutor input) | 12 |
| **Guided independent study hours  (including hours for assessment preparation)** | **152** |
| **Module Total** | **200** |

**ALIGNMENT OF LEARNING OUTCOMES AND ASSESSMENTS:**

**University of Northampton:**

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| **Assessment Activity** | | | **Learning Outcomes** | **Weighting (%)** |
| **Code** | **Assessment Type** | **Assessment Deliverables** |  |  |
| TC1 | Time-constrained assessment | Client workshop outputs (1 hour) | b,f | 25 |
| PJ1 | Project | Study Report(1,500 words)  Presentation (10 minutes) | a,c,d,e | 75 |

The assessment items listed above are graded and contribute to the overall module grade (assessment *of* learning).

**APPROVAL/ REVIEW DATES:**

**Version: 1 (was CSY1019)**

Date of approval: