# 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** | Media Technology |

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| **MODULE CODE** | CSY3058 |
| **LEVEL** | 6 |
| **CREDIT VALUE** | 20 |
| **MODULE LEADER** | Dr Mu Mu |

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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:**

Media Technology is an important aspect to Computer Science. This module will introduce a range of technologies relevant to modern multimedia systems. This includes computer graphics, digital image processing, online video streaming, immersive media, and other advanced applications. Student will develop audio-visual systems in a third generation computer language.

**INDICATIVE CONTENT:**

* Digital audio and sampling
* Concept of images and colour systems
* Graphic manipulation and digital image processing
* Lossless data compression
* Lossy image compression
* MPEG video compression
* FFMPEG and HTTP adaptive video streaming
* Immersive media

**LEARNING OUTCOMES:**

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| **Module Learning Outcome** |
| **On successful completion of the module with limited guidance, students will be able to:** |
| **Subject-Specific Knowledge, Understanding & Application** |
| 1. Critically analyse and apply fundamental multimedia theories and standards. |
| 1. Critically analyse and manipulate multimedia content using relevant multimedia techniques. |
| 1. Critically evaluate and use digital content processing techniques to extract or enhance audio and image features. |
| 1. Critically evaluate project requirements and create a user application using multimedia techniques. |
| **Changemaker & Employability Skills** |
| 1. Design, justify and prototype a solution for business applications or services. |
| 1. Make evidence-based improvements to the usability and the quality of user experience of media-related services. |

**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.** |

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| **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: * Face to face interactive small group session (generic space in groups of approx. 30 e.g. seminars/workshops/tutorials) * Specialist space (e.g. laboratories, studio space) * F2F (broadcast) Lectures (e.g. guest speaker, cohort induction) | 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 | A 2-hour time-constrained test | a,b,f | 50 |
| AS1 | Assignment | An individual technical report (2000 words) and source code. | c,d,e,f | 50 |

The assessment items listed above are graded and contribute to the overall module grade (assessment *of* learning). In addition, there are opportunities for formative assessment (assessment *for* learning), which are ungraded, to support students in achieving the module learning outcomes. These are NOT listed.

**APPROVAL/ REVIEW DATES:**

**Version: 1 (was CSY3010)**

Date of approval: