

**UNIVERSITY COLLEGE CORK**

University College Cork is one of Ireland's oldest institutions of higher education. UCC was originally founded in 1845 and 150 years later the University is internationally acclaimed as Ireland's leading research institution.

**OVERVIEW OF PROGRAMME**

Ireland's media industry is one of the fastest growing sectors in IT and is of significant strategic value to Ireland's future economy. Advances in technology are at the centre of this growth, with the internet, e-mail, mobile phones, games and digital TV now being a common part of everyday life. The creation of interactive digital media is a challenging and complex activity requiring the use of a range of existing and emerging technologies. These Interactive Digital Media products aim to entertain, inform or inspire an audience. Some of the possibilities include

- Creating novel media for entertainment, education and information
- Developing original interfaces and interaction techniques
- Creating new forms of storytelling
- Developing new digital media delivery systems

A blend of creative and technical skills is required to meet the needs of the Digital Media industry. The MSc in Interactive Media equips students with the underlying concepts, technologies and practices of interactive media while teaching the technical skills to create interactive digital media products.

On completion of the course students will have a thorough knowledge of the underlying concepts, technologies and practices of interactive digital media and be able to apply these to create interactive digital media products.



**ENTRY AND ELIGIBILITY**

Graduates of any discipline who have achieved at least a Second Class Grade II Honours degree, or those with an equivalent professional qualification, are eligible to apply, provided there is no significant overlap between their previous courses of study and the content of this course. Significant overlap may occur where candidates have pursued a Computer Science course with significant multimedia or digital media content. In these cases the selection committee will decide the eligibility of the candidate. Selection of candidates for the programme is based on academic achievement and/or on the outcome of an interview. Applicants applying under equivalence require approval from the Faculty of Science.

**PROGRAMME STRUCTURE**

Full-time Students (One year) take 12 taught modules (60 credits) and a substantial project undertaken by the student (30 credits), as follows:

**6 core 5-credit modules:** CS6100, CS6101, CS6102, CS6103, CS6104, CS6105.

**6 elective 5-credit modules from:** CS6110, CS6111, CS6112, CS6113, CS6114, CS6115, CS6116, CS6117, CS6118, CS6119, CS6120

**Research Project:** CS6200 (30 credits)

Part-time Students (2 year day course) take **3 core modules** (15 credits) and **3 elective modules** (15 credits) in **each year**, for a total of 12 separate modules over the two years (60 credits), and a **Research Project** in the second year (30 credits)

**STUDENTS STUDY THE FOLLOWING MODULES**

- CS6100 Authoring (5 credits)**  
Introduction to multimedia authoring using industry-standard authoring environments.
- CS6101 Digital Publishing and Hypermedia Systems (5 credits)**  
Create and publish professional quality websites.
- CS6102 Graphics and Graphic Design (5 credits)**  
The techniques used in the design, creation and publishing of digital graphics.

**CS6103 Audio and Sound Engineering** (5 credits)

The techniques used in digital audio production and post-production.

**CS6104 Digital Video Capture & Packaging** (5 credits)

The techniques and tools for digital video capture, processing and packaging.

**CS6105 Future & Emerging Interaction Technologies** (5 credits)

Explore the potential for new interaction technologies and their creative uses.

**CS6110 Animation** (5 credits)

The principles, methods and tools used in computer animation.

**CS6111 3D Graphics and Modelling** (5 credits)

The fundamental concepts in the modelling of objects and the application of these principles, techniques, and tools for creating 3D graphics.

**CS6112 Image Processing** (5 credits)

The techniques and applications of image processing.

**CS6113 Internet-based Applications** (5 credits)

Develop internet-based digital media applications.

**CS6114 Digital Video Compression and Delivery** (5 credits)

The principles and applications of digital video compression and delivery.

**CS6115 Human Computer Interaction** (5 credits)

The wide range of user-interface devices and their effect on the human user.

**CS6116 Mobile Multimedia** (5 credits)

The principles, techniques and tools for mobile multimedia systems.

**CS6117 Audio Processing** (5 credits)

The principles and applications of digital audio compression and delivery.

**CS6118 Speech Processing** (5 credits)

The principles and applications of speech processing.

**CS6119 Interactive Visualisation** (5 credits)

The techniques used in the interactive visualisation and exploration of data.

**CS6120 Intelligent Media Systems** (5 credits)

The design and implementation of intelligent software systems.

**CS6200 Project** (30 credits) A substantial digital media project, approved by the Department of Computer Science, which builds the skills that have been studied in the taught part of the programme.  
*February '10*

Please note that this course is constantly being revised to keep it as up-to-date as possible. Therefore, the syllabus may differ slightly from that shown here; for latest details see websites listed overleaf.

**Facilities**

Facilities available for use in laboratory and project work include:

- A laboratory of Apple computers equipped with professional graphics, animation, video, audio and VR software;
- An audio studio, equipped with MIDI controllers, synthesisers, samplers, computers with sequencing, a 24-track digital recording facility;
- A graphics laboratory, equipped with graphics workstations, large-screen monitors, high-resolution scanners, professional colour printers;
- Video laboratories equipped with video editing suites;
- Virtual-reality workstations equipped with head-mounted displays, tactile sensors, tactile feedback devices, etc.
- A range of portable audio-visual recording equipment: lighting equipment, digital still & video cameras, etc.

**Career Opportunities**

The MSc in Interactive Media is a conversion course and allows students to change career direction as well as applying their existing skills in new areas. Career opportunities include

- academia
- animation
- digital television
- elearning systems development
- games development
- website design and development



Further Information/Application Procedure

Department of Computer Science:

<http://www.cs.ucc.ie/courses/ppprogrammes.php>

Course Page: <http://multimedia.ucc.ie>

Postgraduate Admissions Office

Telephone +353 -21 -4902876/3241

Email: [postgrad@ucc.ie](mailto:postgrad@ucc.ie) Web: <http://www.ucc.ie/postgraduate>

Fees: <http://www.ucc.ie/academic/postgraduate/calendar/general/index.html>