Graduate Diploma/ MSc in
Healthcare Informatics

COURSE FEATURES

eHealth (Electronic Health) involves the integration of all information and knowledge sources involved in the delivery of healthcare via information technology-based systems. This includes patients and their records, caregivers and their systems, monitoring devices and sensors, management and administrative functions. It is a fully integrated digital 'supply chain' and involves high levels of automation and information sharing.

The EU eHealth Action Plan 2012-2020, states that "eHealth can benefit citizens, patients, health and care professionals but also health organisations and public authorities. eHealth - when applied effectively, delivers more personalised 'citizen-centric' healthcare, which is more targeted, effective, and efficient and helps reduce errors, as well as the length of hospitalisation. It facilitates socio-economic inclusion and equality, quality of life and patient empowerment through greater transparency, access to services and information and the use of social media for health".

COURSE DETAILS

Major code	Grad Dip: X293/MSc: X523
Duration	**Graduate Diploma:** normally two trimesters **MSc:** 12-24 months
Schedule	Full-Time
Next intake	September

In Dec 2013 the Department of Health launched the eHealth Strategy for Ireland. This document identified the skills shortage in this area stating that "the current skills base for eHealth is not encouraging in two respects: (i) The "installed base" of active professionals with eHealth skills is very small and (ii) the relevant capacity within the 3rd level education and research sector is small". It also identified that the current and anticipated skills deficit existing at different levels, ranging from entry-level technicians and support staff to cross-trained clinicians (nurses and doctors), eHealth management and ICT professionals, eHealth researchers and product development specialists. An underlying problem is the low number of eHealth academic specialists who are an essential resource in both: (1) the provision of Health Informatics training across the country, and (2) the establishment of an R&D base and source of eHealth innovation. This situation is unchanged today.

UCD is offering an MSc, Graduate Diploma, and Graduate Certificate in Healthcare Informatics, joining the expertise of several Schools including Medicine, Computer Science; Statistics; and Public Health, Physiotherapy and Sports Science. All the Schools have significant experience in the training of multi-disciplinary students. The curriculum for these programmes has been developed on international best practice, service requirements and end-user preferences and will be continually updated and modified to ensure the needs of these three elements are always met.

COURSE CONTENT & STRUCTURE

X293: Graduate Diploma
Healthcare Informatics (60 ECTS)

In addition to the modules listed under the Graduate Certificate programme, the candidates will complete an additional 30 ECTS made up as follows:

Core (15 ECTS):

»	**Medical Records**	**5 ECTS**
»	**Clinical Information and Decision Support**	**5 ECTS**
»	**Interoperability, Standards & XML**	**5 ECTS**
»	**Information Governance in Health**	**5 ECTS**

Options (15 ECTS):

The candidate selects 2-3 modules totaling 15 ECTS from the list below.

»	**Health Data & Analytics**	**5 ECTS**
»	**Information Visualisation**	**5 ECTS**
»	**Info Systems Implementation**	**5 ECTS**
»	**Human Computer Interaction**	**5 ECTS**
»	**Bioinformatics**	**5 ECTS**
»	**Data Programming with R**	**5 ECTS**
»	**Personalized Medicine**	**5 ECTS**
»	**Data Mining**	**5 ECTS**
»	**Medical Devices & Connectivity**	**5 ECTS**
»	**Info Systems Implementation**	**5 ECTS**
»	**Biostatistics & Data Management**	**5 ECTS**
»	**AI for Personalized Medicine**	**10 ECTS**
»	**AI & Digital Pathology: Theory & Practice**	**10 ECTS**
»	**AI for Medical Image Analysis**	**10 ECTS**

X523: MSc
Healthcare Informatics (90 ECTS)

In addition to the modules listed under the Graduate Diploma programme, the candidates will complete an additional 30 ECTS Research / Dissertation module.

COURSE DELIVERY

The course content will be delivered mainly on campus with some modules offering on-line delivery mode, while the majority are face-to-face modules. The lecturers will come from both the University and the Health Service to ensure an appropriate mix of theory and application.

WHO SHOULD TAKE THIS COURSE?

The course is primarily aimed at existing employees in the health service and IT industry sector who are looking to move into the area of Health Informatics, expand their current knowledge in the area, or get more involved in health IT implementation projects in their respective work locations. The assignments for the various modules are primarily focused on work-based topics, with these assignments being undertaken primarily as group or teamwork. This team-based process mirrors the actuality of IT systems implementation projects or health data / business intelligence analysis in this sector.

ELIGIBILITY

Applicants will normally hold a NQF Level 8 academic award.

Where an applicant does not hold a Level 8 award, consideration will be given to those with relevant and appropriate qualifications and experience working in or closely with the health system.
Such candidates may be interviewed to ensure applicability to the programme prior to acceptance. Candidates who may enter via this route would typically be those currently employed but looking to change the focus of their career into the Health Informatics arena, or those that have health experience but are currently unemployed and looking to re-enter the workforce in the HI field.

COST / FEES

Please follow the link below for information on fees.

> » **www.ucd.ie/students/fees**

SPRINGBOARD

40 places on the Graduate Diploma are government funded under the Human Capital Initiative (HCI) via the Springboard.ie website. The following are eligible to apply for courses in 2023/24 academic year (subject to the applicant meeting all requirements, e.g., academic requirements):

- **Returners (formerly referred to as Homemakers):** May apply to all courses if they meet the nationality/visa requirement and residency criteria.

- **People in employment:** May apply to all courses if they meet the nationality/visa requirement and residency criteria.

- **The unemployed or formerly self-employed:** All courses are open to these categories of applicants, with the exception of the two-year part-time ICT conversion courses which are not open to those in receipt of a Jobseekers-related payment.

Depending on your situation, the fees are provided in full or subsidised. For more information, and to apply, please visit **www.springboardcourses.ie**

CONTACT

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For more information on this course:
www.ucd.ie/medicine

Apply for this course:
www.ucd.ie/apply