

INTRA Programme

B.Eng Digital Media Engineering



Introduction

Digital Media, sometimes also known as “new media” are new audio, visual and textual information sources which underpin the new applications and services of the Information Society. These include: digital TV; web-casting; computer games; audio-visual editing and indexing, storage and retrieval of multimedia content.

Degree Programme Overview

The B.Eng in Digital Media Engineering is designed to give students the required engineering skills necessary to plan, design and implement the technology of computer-based digital media delivery. Specific technical knowledge and skill will be achieved in the areas of engineering, signal processing, network, software and web-engineering. The ability and intellectual insight required to understand, discriminate between, and make use of new developments, as they arise, is at the heart of this programme.

The programme is designed on the basis of the following six academic themes:

- Media-data processing and end user systems
- Hardware
- Telecommunications
- Engineering Mathematics and Sciences
- Software
- Integrative and Experimental Work

Work Areas

Students of the B.Eng. Digital Media Engineering have the ability to work in many diverse areas:

User interface design for web-TV set-top boxes	Web-interfaces for delivery of content to diverse environments	Development of virtual reality and tele-presence applications
Service creation for mobile networks	Technology development for the computer animation industry	Systems for e-commerce applications
System development for database-backed web services		

Relevant Work Experience:

DCU’s co-operative education programme “INTRA” (INtegrated TRaining) is a mandatory feature of the B.Eng. Digital Media Engineering. Students are required to complete a six month *INTRA* placement at the end of third year, from April to September inclusive.

Student Availability

Students are available for interview from October. Please post vacancies on the *INTRA on line* web site at www.intra.dcu.ie, or send details of relevant vacancies to:

INTRA Unit, Student Affairs,
Dublin City University,
Glasnevin, Dublin 9, Ireland.
Phone: 00 353 1 700 5033 Fax: 00353 1 700 5505
Web: www.intra.dcu.ie

B.Eng DIGITAL MEDIA ENGINEERING

Year 1	Year 2	Year 3		Year 4
Physics 1 & 2	Engineering Mathematics 3 & 4	Signals	I N T E R N E T A	Digital Signal Processing
Engineering Mathematics 1 & 2	Object Orientated Programming 1	Digital Electronics		Image Processing & Analysis
Electronics Fundamentals 1 & 2	Software Engineering 3 & 4	VLSI Design		Server-side Design
Software Engineering 1 & 2	Circuits & Systems 1 & 2	Real-Time Design		Mobile Data and Voice Systems
Digital Electronics	Digital Circuits & Systems	New Enterprise Development 1 & 2		Image and Video Compression
Electronic Engineering Design	Foundations of TCP/IP	Object Orientated Programming 2		Web Usability Engineering
Electromagnetism	Data Communications & Computer Networks	Computation/Simulation		Secure Systems Admin and Inter-network Security
Web Communications	Database Systems			Digital Sound Processing
	3-D Computer Graphics			Fourth Year Project