

Information Technology in the B.A. Degree at NUI, Galway

What is INFORMATION TECHNOLOGY?

Information Technology (IT) is a broad term that encompasses a wide spectrum of knowledge and skills related to the design, development and deployment of Information and Communication Technologies in the modern world, as well as the study of the social and economic impacts of this deployment.

While we all use I.T. only some of us are lucky enough to be the creators and innovators responsible for developing new uses, products, services, and art forms using the core technical and inventive skills of the technology.

What type of person is suited to study this subject?

The study of Information Technology is suited to students who are inquisitive, creative, like problem solving and want to understand more about the workings of technology and how it is developed and deployed in the world around us. IT skills are best developed through practice and so the study of IT is suited to students who are willing to work consistently and practice their skills, rather than leaving their studies to the last minute.

The combination of IT with another humanities subject appeals to students who have diverse interests and are eager to explore more than one subject in their undergraduate education. This suits students who would like to explore different applications for IT or create linkages between IT and other subjects.

What skills will a student gain from this course?

Students studying IT in the BA degree at NUI, Galway will gain immediately useful technical skills: both in the use and design and development of computing systems. In addition, students will develop project management skills during their IT projects, including time management, team work and communication. During the study of IT, students' communication and research skills – both written and oral – are honed in a variety of settings and formats (classroom, online, final year BA-IT conference paper presentation).

Graduates from the BA programme have a variety of employment opportunities: all traditional BA avenues are available, and enhanced through the knowledge of computing acquired in addition to more specific IT employment opportunities.

What is involved in the study of Information Technology at NUI, Galway:

In the first year of the Bachelor of Arts degree students will take Information Technology as one of **three** subjects. Progressing with their Information Technology studies to final year sees students combining Information Technology with one other subject for their final degree.

The study of Information Technology (IT) at third level develops the cognitive and applied skills needed for the design, application and support of computerised systems in every domain (education, entertainment, health, industry, telecommunications).

First Year: During the first year of IT study in the BA degree at NUI, Galway, students are introduced to the fundamentals of IT, computing systems and web development in their Computing Systems Module, and students also develop immediately useful skills in computer programming in their programming modules.

IT to Degree Level: Building on this foundation, those taking IT into second and third year are exposed to more advanced topics in programming, information systems (inc databases), computing systems and their application (humanities applications, artificial intelligence, human computer interaction, multimedia systems, internet development and other topics). All of the IT courses are complemented by practical laboratory classes and assignments.

Final Year Project: Final year students undertake a significant development project in groups and implement a computing solution to a real-world problem using the technology skills developed over their three years of study.

Curriculum Structure of IT Subject in BA:

<i>Year 1</i>	<i>Year 2</i>	<i>Year 3</i>
Computer Systems: Introduction to the fundamentals of Information Technology and Computing	OO Programming 1	OO Programming 3
Algorithms: Development of logical thinking and problem solving skills.	OO Programming 2	Humanities Applications
Programming I & II: Computer programming skills	Information Sys 1: Databases	Final Year Project
	Information Sys 2: Web-based Information Systems	<i>Two Optional Modules from the following: AI, HCI, Multimedia, and Networks & Communications</i>
	Systems Analysis & Design	
	Web Application Development	

Taken in combination with another Arts subject, IT offers a well-rounded third level education matching the needs of the information society and provides the graduate with valuable vocational skills.