



# Department of Computer Science

The Department of Computer Science at Cork Institute of Technology is one of the largest Computer Science departments in Ireland.

## Undergraduate

**We offer leading degree programmes in Software Development and Information Technology**

## Contact us

Department of Computer Science  
Cork Institute of Technology  
Bishopstown  
Cork  
T12 P928  
Ireland

Phone: +353 21 4335160  
Email: [cs@cit.ie](mailto:cs@cit.ie)  
Web: <http://cs.cit.ie>

We offer a range of modern undergraduate programmes and a host of opportunities at master's degree and at PhD level.

Our industry-engaged programmes match the needs of our economy and have an excellent reputation for producing some of the most employable computer science graduates in the country.

Our programmes teach students how to think critically and apply logical reasoning to solve complex problems. Students learn key transferable skills that make them both competitive and adaptable when they enter the workforce.

In third year, students are placed in companies for up to nine

months. During this time students will develop skills that will make them highly employable.

The increasing demand for our graduates has led to above-average and faster wage growth in this field relative to others.

There are many exciting industry and research opportunities for graduates in roles such as Software Development, Cybersecurity, System Administration, Big Data, Analytics, Internet of Things (IoT), Research, IT Management and many other areas.

 **CORK  
INSTITUTE OF  
TECHNOLOGY**  
INSTITIÚID TEICNEOLAÍOCHTA CHORCAÍ





## BSc (Honours) Software Development

"Software is a great combination between artistry and engineering." - Bill Gates

If you have a passion for programming this flagship bachelor's degree can open up multiple career opportunities for you. Software engineers design and develop large complex systems used in industry, banking, manufacturing, financial services, logistics, technology and medical applications, to name but a few.

As this is a modern industry-linked degree you will study relevant up-to-date modules. The programme was designed with several pillars. These pillars include Computer Science, Software Development, Data Science, Operating Systems and Software Engineering.

The Software Development pillar takes you on a journey from Programming Fundamentals to Modular Programming to Object Oriented Principles to

Object Oriented Programming to Distributed Systems Programming to App Development Frameworks topping off with Data Driven Microservices.

The Data Science pillar starts with an Introduction to Databases before moving on to Database Design, NoSQL Data Architectures, Programming for Data Analytics, Machine Learning and finally Big Data & Analytics. Please refer to the programme schedule for all module details.

The programme has a significant work placement element where students are placed with selected employers for up to 9 months starting in January of year three.

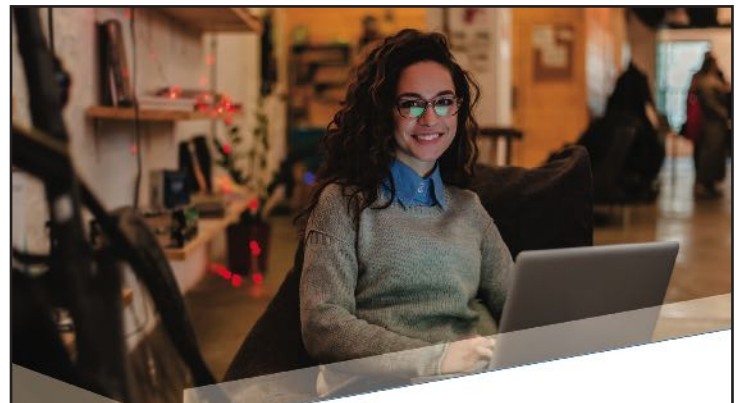


### Undergraduate

This programme is delivered full-time over four academic years.

#### Contact us

Dr Alejandro Arbelaez  
Department of Computer Science  
Cork Institute of Technology  
Bishopstown  
Cork  
T12 P928  
Ireland  
Phone: +353 21 4335193  
Email: [Alejandro.Arbelaez@cit.ie](mailto:Alejandro.Arbelaez@cit.ie)  
Web: <http://cs.cit.ie/sdh>



## BSc (Honours) Computer Systems

The Internet of Things is here and it's growing rapidly. Smart, connected devices are already transforming our world.

The BSc (Hons) in Computer Systems programme is a software development degree that shares the core modules found in the BSc (Hons) in Software Development programme. The Computer Systems programme differs in that it focuses on a number of key areas including computer networking, embedded systems and the Internet of Things (IoT).

Embedded systems have become widespread in industry and can be found in almost all modern consumer devices from washing machines to cars. The Internet of Things (IoT) is starting to play a significant role in industry and at home. With growth and advancements in the field of electronics and wireless communications, devices around us are able to communicate in

a better way than ever before leading to new possibilities and opportunities.

Computer systems engineering is a growing market in today's computer industry. Graduates of this programme will be equipped with the necessary knowledge and engineering skills to work as a software engineer in the rapidly growing area of embedded systems and IoT.

The programme has a significant work placement element where students are placed with selected employers for up to 9 months starting in January of year three.



### Undergraduate

This programme is delivered full-time over four academic years.

#### Contact us

Dr Paul Davern  
Department of Computer Science  
Cork Institute of Technology  
Bishopstown  
Cork  
T12 P928  
Ireland  
Phone: +353 21 4335576  
Email: [Paul.Davern@cit.ie](mailto:Paul.Davern@cit.ie)  
Web: <http://cs.cit.ie/cs>



## BSc (Honours) IT Management

Graduates from this programme are in huge demand with opportunities in sectors such as Information Security, Networking, Cloud Computing, FinTech and beyond.

This flagship information technology degree has an excellent curriculum combining deep technical modules with IT management modules. As a result, graduates of this highly rated programme are in great demand.

This honours bachelor's degree in IT Management is built on key industry pillars designed to prepare the graduate for roles in Information Security, Networking, Cloud Computing, Virtualisation and Storage, Systems Administration, IT Project Management, IT Planning, IT Compliance, and many more related areas.

Along with learning about IT management principles, you will also learn about cybersecurity

which is a rapidly expanding sector of the computer industry. As more technology goes online, you will learn how sensitive information may be at risk and the steps you can take to protect it.

The curriculum is designed to allow you to choose from a range of computer science elective modules as you progress through the degree programme.

The programme has a significant work placement element where students are placed with selected employers for up to 9 months starting in January of year three.



### Undergraduate

This programme is delivered full-time over four academic years.

#### Contact us

Noreen Gubbins  
Department of Computer Science  
Cork Institute of Technology  
Bishopstown  
Cork  
T12 P928  
Ireland  
Phone: +353 21 4335581  
Email: [Noreen.Gubbins@cit.ie](mailto:Noreen.Gubbins@cit.ie)  
Web: <http://cs.cit.ie/itm>

## Computer Science Degree Programmes

Today, there are two main branches of Computer Science and we are the only department in the region to offer both.

- Software Development programmes that teach you how to design and build new enterprise, mobile, desktop, cloud, and data driven applications .
- IT programmes that teach you how to secure, develop, manage an IT department, how to design and maintain modern systems and services.

Our graduates have the skills to meet the challenges and opportunities of tomorrow. Staff from the Department of Computer Science work closely with industry to create programme content that is current and relevant. As a result, our students gain modern skills and knowledge that will benefit them for years to come. Find out more about our programmes using the web links below.

Level 8 Programmes & CAO Codes	Web Links
BSc (Hons) Software Development (CR106)	<a href="http://cs.cit.ie/sdh">http://cs.cit.ie/sdh</a>
BSc (Hons) Computer Systems (CR116)	<a href="http://cs.cit.ie/cs">http://cs.cit.ie/cs</a>
BSc (Hons) IT Management (CR310)	<a href="http://cs.cit.ie/itm">http://cs.cit.ie/itm</a>
Level 7 Programmes & CAO Codes	Web Links
BSc Software Development (CR016)	<a href="http://cs.cit.ie/sd">http://cs.cit.ie/sd</a>
BSc Information Technology (CR888)	<a href="http://cs.cit.ie/it">http://cs.cit.ie/it</a>