# ONLINE

This programme is delivered part-time online over 24 months.

## Contact us

Eoin O'Regan Department of Computer Science Cork Institute of Technology Bishopstown Cork T12 P928 Ireland

Phone: +353 21 4335116 Email: Eoin.ORegan@cit.ie Web: http://cs.cit.ie/hdip-cloud

# Higher Diploma Cloud Computing

"The Higher Diploma in Cloud Computing has taken me on a journey where I learned about hardware, software, programming languages and cloud computing. Whilst the course demands that the student puts in a big effort, the rewards are huge." - Graduate of the programme.

Cloud Computing refers to the practice of using a network of remote servers hosted on the Internet to store, manage, and process data, rather than a local server or a personal computer.

The Higher Diploma in Cloud Computing programme is a graduate conversion course designed for level 8 degree graduate from non-computing disciplines.

The Department of Computer Science has offered courses under the Springboard+ banner for a number of years. These courses were designed and developed in close collaboration with industry partners, provide a dynamic pipeline of job-ready graduates, with up-to-the-minute skills, and valuable qualifications, for sectors of the Irish economy that are expanding and recruiting.

CIT hosts its own private cloud infrastructure to support the delivery of modules giving students 24/7 access to state-ofthe-art cloud computing labs. All lectures are delivered online by academic and industry experts.



#### **Department of Computer Science**

The Department of Computer Science at CIT is one of the largest Computer Science departments in Ireland. 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 the most employable computer science graduates in the region. These highly skilled graduates are in huge demand and contribute significantly to the development of the region. As technology plays a greater role in our society the growth in the demand for these graduates will continue year after year.

#### Background

Cloud computing is a type of on demand sharing of Internet-based computer resources and data. It represents an era in computing where companies can out source their IT functions enabling greater productivity, IT flexibility, performance and agility. This model of computing allows IT departments to focus on strategic initiatives and innovation rather than on infrastructure maintenance and support.

### Cloud Computing (HDip)

Cork Institute of Technology offers this unique and innovative graduate conversion programme which is designed to address the skills shortage in the ICT industry. The Higher Diploma in Cloud Computing provides graduates from other disciplines with the opportunity to study the key principles and technologies that support the deployment of cloud computing. This part-time fully online programme is delivered over 4 semesters (two years).

Designed to address the widening practical and theoretical skills shortage in cloud computing the programme delivers content that follows best practice in industry. It has a strong applied emphasis which is supported by in-depth theoretical knowledge. The continuing trend of skills shortage in this area is predicted to increase the global demand for cloud computing graduates.

Graduates may also wish to continue to MSc level in this exciting field of study.

#### Who Should Apply?

Are you interested in a career in Cloud Computing? Do you hold a level 8 honours degree? Are you eligible to apply under the <u>Springboard+</u> initiative? If so, this programme is the right choice for you.

The Springboard+ initiative gives an opportunity to job seekers to access relevant courses in CIT free of charge while maintaining their benefits. Places are also available on some courses for those eligible in employment who are looking to upskill or homemakers not in receipt of a DSP payment.

#### **Programme Structure**

The programme places significant emphasis on student learning by doing. It adopts a practical, hands-on, approach to learning, where many modules are fully assessed using continuous assessment methods. This 60-credit part-time online programme is delivered exclusively online over 24-months. Each semester has a number of mandatory modules and a choice of electives as outlined below.

| Semester 1 (Autumn - Year 1)       | Туре       | Credits |
|------------------------------------|------------|---------|
| <b>Object Oriented Principles</b>  | Mandatory  | 5       |
| Requirements Engineering           | Mandatory  | 5       |
| Network Systems                    | Mandatory  | 5       |
|                                    |            |         |
| Semester 2 (Spring - Year 1)       | Туре       | Credits |
| Data Management Systems            | Mandatory  | 5       |
| <b>Operating Systems</b>           | Mandatory  | 5       |
| Systems Scripting                  | Elective 1 | 5       |
| Free Choice Module (Various)       | Elective 2 | 5       |
|                                    |            |         |
| Semester 3 (Autumn - Year 2)       | Туре       | Credits |
| <b>Cloud Computing with Python</b> | Mandatory  | 5       |
| Cloud Infrastructure               | Mandatory  | 10      |
|                                    |            |         |
| Semester 4 (Spring - Year 2)       | Туре       | Credits |
| Cloud Architectures                | Mandatory  | 5       |
| Computer Science Project           | Mandatory  | 10      |

Module descriptors can be viewed under the Computer Science link at http://courses.cit.ie. Recognition of Prior Learning information is available at www.cit.ie/rpl.