



Technology
Ireland
ICT



Institute of Technology
Blanchardstown
Institiúid Teicneolaíochta
Baile Bhlainséir



BSc in Data Centre Operations & Management

2 Years Part-time – Primarily Online
Starts January 2019

Data centre facilities are a large and fast-expanding part of the Irish economy. The expected investment in Irish data centre facilities in Ireland is significant, with the potential to reach €9bn by 2021. Data centre providers have signalled concern that the supply of data centre operations and management technicians, and allied qualifications is limiting. These qualifications are deemed as key to meeting the skills demand of this nascent sector to gain and enhance competitiveness globally.

A gap exists between separate skillsets in new engineering technicians, who are required to operate in environments that integrate technology from a multitude of different disciplines, for example electrical and electronic technology; mechanical and thermodynamic science and technology; and computer networks and facilities management. New entrants into the industry rarely hold qualifications across this broad range, typically holding either mechanical or electrical qualifications, but rarely both.

Course Aims

This BSc in Data Centre Operations and Management aims to produce graduates with relevant industry-specific skills to support sustainable data centre processes and practices, with clear professional career progression routes. It is a Level 7 Ordinary degree developed and delivered by the School of Informatics and Engineering at the Institute of Technology Blanchardstown in collaboration with Technology Ireland ICT Skillnet.



In January, IT Blanchardstown, IT Tallaght and the Dublin Institute of Technology will join together to form Technological University Dublin (TU Dublin) and graduates of these programmes will receive their awards from Ireland's first technological university.

Learner Outcomes

The integrated, work-based training delivery model will inform learners' daily work, and complement in-house training courses. The course is designed to help the learner achieve a blend of widely-differing skills and competencies necessary to work in such a highly-automated environment. The blended learning delivery approach directly links what students learn in labs and lectures, to knowledge and skills required for the broad range of careers in data centres and allied service industries.

The course will equip technicians with a unique blend of knowledge, skills and competence in electronics, electrical power systems, heating, cooling, lighting and ventilation, as well as data cable routing design. Data centre operations and management technicians install, commission, monitor and maintain (including preventive maintenance), troubleshoot, and repair complex systems. They are often required to establish engineering specifications for such systems, to negotiate with vendors and assist in installation and setup, to tune control parameters and to monitor the system's resulting performance, checking it against required. This course aims to equip them with the skills to perform these tasks.

Programme Content:

Engineering Systems and Transforms

Data Networks

Quality Systems

Electrical Power Systems for Data Centres

HVAC Systems for Data Centres

Automation, Instrumentation and Control

Facilities Management

A work-based Project



Learning Process

The learning process uses both on-campus contact and online delivery in blended delivery mode. This will consist of

- Weekly online lectures and tutorial sessions, delivered throughout each of the 12-week semesters. Sessions are delivered live, and also recorded for later study. Learners can attend these online sessions synchronously, or listen to the recorded versions when time permits.
- A number of on-site lab days are held in ITB each semester, usually 3 days per semester. Students will do a series of practical labs and tutorial sessions. Completion of lab assignments based on these on-site lab sessions will contribute, partly or completely, depending on the module, to the Continuous Assessment component of a student's mark for each module.



Entry Requirements

The Level-7 BSc in Data Centre Operations and Management Course will accept suitably-qualified entrants from a number of streams.

- Entrants with a Higher Certificate (NFQ level 6) in a cognate discipline, for example Mechatronic Engineering, or Electrical Instrumentation Technology will be eligible to apply. Such applicants may be required to take bridging modules during the programme, and the Higher Certificate discipline will determine the bridging modules (if any, required).
- Applicants who have completed a FETAC Level 6 award (National Craft Certificate) in a craft such as Electrical, Electrical Instrumentation or Fitting, and have 3 years post-qualification experience in an industrial environment may also be considered eligible for admission. However, such applicants will also be required to take bridging modules during the programme and may be required to do a 12 weeks Level 6 Higher Certificate course in Data Centre Operations (also provided online at ITB and part-funded by Skillnets) prior to starting the BSc course.

Progression Routes

It is planned that graduates of the level-7 BSc in Data Centre Operations and Management will be able to progress onto a level-8 BSc (Hons) in Data Centres Operation and Management Course, delivered by ITB in part-time blended learning mode. This level-8 course is planned for development in the near future with support from Technology Ireland ICT Skillnet

Typical Course Schedule:

YEAR 1	Semester SPA	JANUARY – MAY
	Semester 1	JUNE – AUGUST
YEAR 2	Semester 2	SEPTEMBER – DECEMBER
	Semester 3	JANUARY – MAY
	Semester 4	SEPTEMBER – DECEMBER





How To Apply

Click here to apply via our online application form:

<https://goo.gl/forms/datLceaTTSKKStAm1>

For further details please email info@ictskillnet.ie

Cost

Full Cost €5,500 however eligible candidates can avail of funding to reduce this to two yearly payments of €2,200.

Note: If candidates do not need to undertake the SPA Semester, the cost is further reduced to two yearly payments of €1,820.

Application Closing Date – 30th November 2018

Contact

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www.ictskillnet.ie



Technology Ireland ICT Skillnet is co-funded by Skillnet Ireland and member companies. Skillnet Ireland is funded from the National Training Fund through the Department of Education and Skills.



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