Diploma in Biopharmaceutical Manufacturing Operations

This Special Purpose Award provides an accredited qualification for individuals who are seeking to up-skill or cross-skill in order to gain sustainable employment in sectors such as biopharmaceutical, pharmaceutical and medical device industries.

Integral elements of this one year Springboard Programme are the work placement and a two-day training course at the state-of-the art National Institute for Bioprocessing Research and Training (NIBRT).

The students gain valuable knowledge and skills of the healthcare manufacturing environment to further enhance their skillset towards secure employment. This is an excellent chance for **engineers** and **scientists** to re-direct their careers towards these related industries.

Further Information

"Spring Forward to give Students the Edge" is a Graduate's testimonial which can be viewed on http://extendedcampus.cit.ie/newsletter

How to Apply: Applications can only be made on www.springboardcourses.ie

Information on course: http://www.cit.ie/springboard

Information on modules: http://courses.cit.ie

Enquiries

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Programme Summary

This part-time one year programme involves the completion of 10 modules which is delivered by day/evening and can also facilitate part-time mode. Students will attain knowledge and practical skills in key subject areas which are pertinent to working in a highly regulated manufacturing environment such as **Upstream** and **Downstream Processing**, **Manufacturing Operations**, **Good Manufacturing Practices (GMP)**, **Technology Transfer and Quality Management Methodology**. Continuous assessment is a vital element of the programme with regular submissions required for laboratories and assignments. There is a strong laboratory focus that will develop students' ability to analyse and critically evaluate scientific and engineering data in order to communicate experimental findings in accordance with current technical reporting methodology. The college provides tutorials on various modules and writing skills through a free resource called the Academic Learning Centre in CIT (http://alc.cit.ie)

The aim of the work placement is to introduce the learner is to a structured environment in a relevant sector and to develop an understanding of the organisations, operations and procedures. The placement affords the student an opportunity to apply his/her learning from the course in a practical situation.

In NIBRT, the students will gain practical experience in four key areas in biopharmaceutical manufacturing: **Cell Culturing**, **Aseptic Processing**, **Sterilisation**, **Isolation and Purification** during the **two-day training course**. NIBRT is a world-class institute that provides training and research solutions for the bioprocessing industry replicating the most modern industrial bioprocessing facility. Students can also avail of the CIT service, The CV Clinic which is part of the Career's Office, who will assist students in preparing their CV and enhance their interview skills.

Entry Requirements

The entry requirements for this course are a <u>minimum</u> of a Higher Certificate (Level 6) in **any** Engineering or Science discipline or its equivalent.

Exemptions

Applicants who have appropriate experience and knowledge of the Pharmaceutical, Biotechnology, Food or Medical Devices industries may be considered exempt from examination of some modules upon providing evidence via CIT's Recognition of Prior Learning (RPL) scheme (www.cit.ie/rpl).

Career Opportunities

- Validation/Commissioning Engineer
- Quality Engineer
- Laboratory Scientist

- Technical Specialist
- Quality Assurance Specialist
- Process Technician

Course Delivery

[Total of 60 credits (10 modules + work placement)]

SEMESTER 1 (MID-SEPT – EARLY JAN)	SEMESTER 2 (END JANUARY – END MAY)
Biopharmaceutical Upstream	Biopharmaceutical Downstream
Manufacturing Technology	Manufacturing Operations
Validation Science	GMP2/Quality Control
Lean Manufacturing	Cleanroom Management
Cells and Biomolecules	Technology Transfer
NIBRT Training Course (2 days in January)	Industrial Placement (From June)