

## MSc IN (BIO) PHARMACEUTICAL MANUFACTURING TECHNOLOGY (NFQ LEVEL 9)

18 months part time over 3 semester, with 30 credits per semester

### Who is this course for?

The principle aim of this programme is to provide graduates with diverse skills to work competently in the following manufacturing sectors: Biopharma manufacturing; Finished Dose Manufacturing; Small molecule manufacturing; Medical device manufacturing; Clinical trials; Excipient suppliers; Project engineering. It will enable students to develop key high-level skills in manufacturing and processing, quality assurance, product development, project management, process improvement and regulatory compliance.

### Entry Requirements

The entry requirements for this programme are a minimum 2nd class honours degree (level 8) in a Science/Quality/Engineering or related discipline.

### Course Timetable

The course will involve a mix of online, classroom delivery and laboratory sessions for the first two semesters. The third semester is devoted to the research dissertation/thesis, which takes place under the guidance of an appointed academic supervisor.

### Who can apply?

This course is open to all eligible students.

### Course Summary

This course has been designed to provide Science/Engineering graduates with specialist knowledge and skills to work in (Bio)Pharma in both a manufacturing and research environment. It will focus on design process control systems; regulatory practice for manufacturing processing; integration of new technology projects; Lean Manufacturing to improve efficiency, quality, safety and compliance; continuous improvement, product and process improvement.

Assessment modes for the taught modules will include a blend of assignments, in-class examinations, laboratory reports, oral presentations, problem-solving exercises and formal written examinations. Students will be expected to conduct research and write up a dissertation for examination in the 3<sup>rd</sup> semester. This can take place in the place of employment.

### Career Opportunities

Graduates from the MSc in (Bio)Pharmaceutical Manufacturing Technology will develop the relevant expertise and skills to work in diverse roles including: Process Engineering; Validation; Technology Transfer; Process Manufacturing; Laboratory analysis; Formulation Development; Management roles; Sterile processing; Regulatory Affairs; Clinical data analysis; Project Management; Process Improvement roles.



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### Module Information

#### Semester 1:

Title	Credits
Advanced Pharma/Regulatory Statistics	10
Bio-Process Manufacturing Technologies	10
Regulatory Compliance	5
Small Molecule Manufacturing	5

#### Semester 2:

Title	Credits
Finished Dose Manufacturing Technologies	5
PAT-Validation	10
Pharmaceutical Management Systems	10
Research Methods (Literature Review)	5

#### Semester 3: Thesis module

### How to Apply

#### Students apply directly to IT Tallaght

Please apply through [www.it-tallaght.ie](http://www.it-tallaght.ie)

Total cost of course (90 credits) is €7500

Semester 1	€3000
Semester 2	€3000
Semester 3	€1500

### Please Note

You will be required to pay a €100 application fee with your application. If you are not offered a place on the course your application fee will be refunded. If you are offered a place on the course your fee will be put towards your full course fees. If you do not accept the offered place you will forfeit the application fee.

**The balance of fees due are as follows:  
On acceptance of place - €550**

**Payment of half your course fees due by 31 October 2018.**

**Payment of full fees due by 31 January 2019.**

### KEY DATES

<b>INDUCTION</b>	<b>1<sup>st</sup>/8<sup>th</sup> September 2018</b>
<b>CLASSES BEGIN</b>	<b>Mid-September 2018</b>
<b>CLASSES FINISH</b>	<b>End April 2019</b>
<b>EXAMS</b>	<b>January and May 2019</b>
<b>RESULTS</b>	<b>June 2019</b>

### For further information – course specific

Please contact: [mary.deasy@it-tallaght.ie](mailto:mary.deasy@it-tallaght.ie)

### For queries on the application process

Please contact [LLL@it-tallaght.ie](mailto:LLL@it-tallaght.ie) or phone the Lifelong learning Team @ 01-4042101