

# BSc in Pharmaceutical Healthcare

TU875

**Qualification awarded:** BSc (Pharmaceutical Healthcare) Level 8

**Duration of programme:** 4 years

**Type of programme:** Honours Degree

**Number of places:** 32 approx.

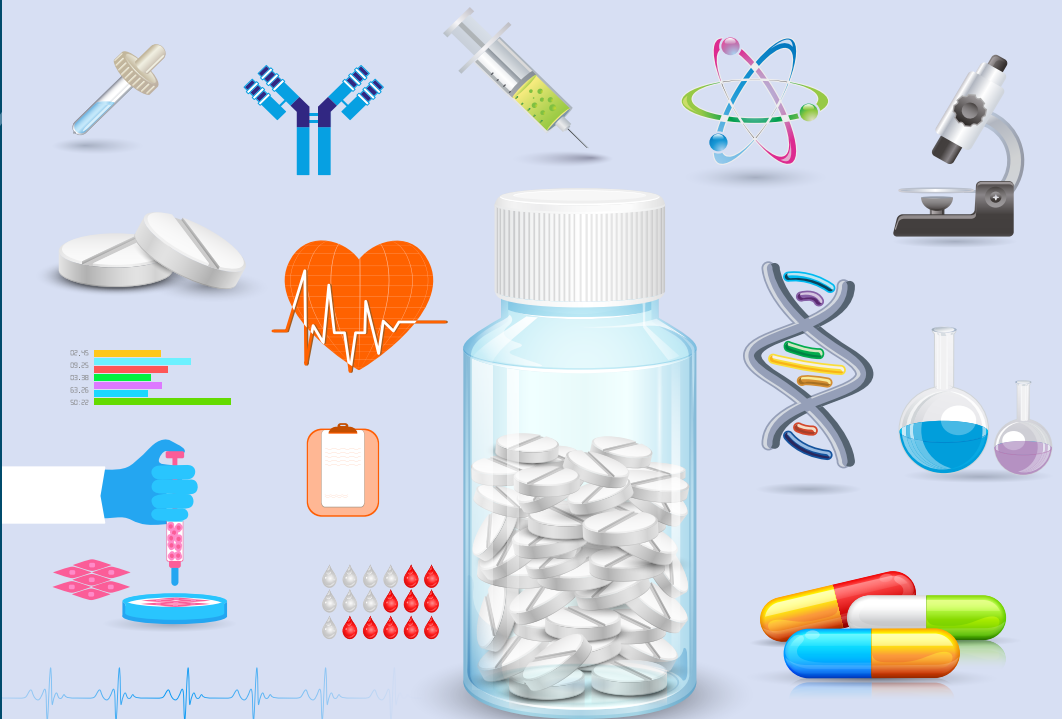
**Location:** TU Dublin, Grangegorman

The Pharmaceutical Healthcare programme provides students with an integrated Programme of practice and theory focussing on the key concepts in pharmaceutical sciences and technology. The Programme develops students knowledge of the fundamental principles, as well as latest developments and applications, equipping them for employment in a variety of areas within the biopharmaceutical and pharmaceutical manufacturing,

and associated industries.

The Programme gives students a broad understanding of the biopharmaceutical and pharmaceutical industries, in order to meet the current and anticipated technical and skills needs of these industries.

The Programme produces graduates with a unique industrial understanding.



## Module Listing:

**Year 1:** Principles of Cellular and Systems Biology, Fundamentals of Inorganic/Organic/Physical Chemistry, Introductory Physics, Mathematics for Scientists, Computer Applications and Digital Skills, Basic Microbiology, Introduction to Manufacturing and Introduction to Biopharmaceuticals.

**Year 2:** Structural and Transformational Biochemistry, Natural and Synthetic Organic Chemistry, Statistics, Instrumentation for (Bio)Pharmaceuticals, Pharmaceutical Microbiology, Process Technology, Regulatory Affairs, Quality Systems.

**Year 3:** Biotechnology, Principles of Pharmacology & Toxicology, Pharmaceutical Formulation, Pharmaceutical Microbiology, Chemical Technology, Work Placement.

**Year 4:** Core: Research Dissertation, Responsible Research, Lean Manufacturing and Six Sigma, Design of Experiments and Multivariate Analysis, Process Analytical Technology, Optional module.

**Pharmaceutical Manufacture Stream:** Medicinal Chemistry, Drug Discovery and Synthesis, Advanced Analytical Techniques.

**Biopharmaceutical Manufacture Stream:** Advanced Biotechnology, Bioprocessing, Immunology and Diagnostics.

## Career Opportunities:

Programme graduates will be equipped with the skills required to work in a variety of roles within the science and technology industries. Our graduates are employed in diverse roles, including; quality control/assurance, product manufacture and development, sales and clinical trials. Employers of our graduates include; Mylan, Novartis, Pfizer, Servier and Valient. Graduates have also entered Graduate Development Programmes in large multinational companies such as Abbot, where there are ongoing and expanding opportunities in the coming years in Ireland and internationally.

### LEAVING CERT ENTRY REQUIREMENTS:

#### Minimum No of:

Subjects . . . . . 6  
Honours (H5) . . . . . 2

#### Minimum Grade in:

Maths. . . . . O4/H7  
English or Irish. . . . . O6/H7

#### Other Requirements

At least O4/H7 in one of: Physics, Chemistry, Physics & Chemistry or Biology.

### FETAC LEVEL 5 ENTRY REQUIREMENTS:

A FETAC Level 5 entry route to this programme is available. Please visit [www.dit.ie/study/undergraduate/fetac](http://www.dit.ie/study/undergraduate/fetac)

## Further Information:

**Dr. Barry Ryan**

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**Infinite  
Possibilities**

