# MSC (PHARMACEUTICAL TECHNOLOGY & QUALITY SYSTEMS) (1 YEAR PATHWAY)

## Overview

**NFQ Level 9, Major Award**

The Programme Management Committee may permit students to undertake the MSc (Pharmaceutical Technology and Quality Systems) (1 year pathway) only if they hold a Postgraduate Diploma (equivalent to NFQ Level 9) in Pharmaceutical Technology and Quality Systems or a similar award from an accredited School of Pharmacy, which has been completed within the previous five years.

Students on the two year programme should refer to the MSc (Pharmaceutical Technology and Quality Systems) (2 year Pathway) (https://ucc-ie-public.courseleaf.com/programmes/mscptq/) page for programme information.

## Programme Requirements

For information about modules, module choice, options and credit weightings, please go to Programme Requirements (p. 1).

## Programme Requirements

| Code | Title | Credits |
|---|---|---|
| Students take **30** credits as follows: | | |
| *Core Modules* | | |
| PF6210 | Dissertation in Pharmaceutical Technology and Quality Systems [1] | 30 |
| **Total Credits** | | **30** |

[1] The research project will be centred in an industrial pharmaceutical setting. Consideration will be taken of the candidate's chosen project area but all project titles must be approved in advance by the programme committee and supervised by a member of academic staff at UCC.

## Examinations

Full details and regulations governing Examinations for each programme will be contained in the *Marks and Standards Book* and for each module in the *Book of Modules*.

## Programme Learning Outcomes

**Programme Learning Outcomes for MSc in Pharmaceutical Technology and Quality Systems (NFQ Level 9, Major Award)**
On successful completion of this programme, students should be able to:

- Identify and evaluate the role of Quality Systems and Good Manufacturing practices (GMP) in the pharmaceutical industry, and to be aware of the latest trends in good clinical, manufacturing, laboratory, validation and distribution practices;
- Define the legal basis and professional duties of the Qualified Person as defined by EC Directive 2001/83/EC and apply a risk based approach to the evaluation of quality, safety and efficacy of pharmaceutical products;
- Derive and apply a science based approach to solving quality based problems in the manufacture of pharmaceuticals;
- Demonstrate a comprehensive knowledge of pharmaceutical sciences, which includes a sound basis in pharmaceutical chemistry and analysis, pharmacology, pharmaceutics, microbiology and biochemistry;
- Apply the principles of pharmaceutical dosage-form design and the technologies involved in industrial manufacture of medicinal products (both sterile and non-sterile) to the production of pharmaceutical products;
- Outline the stages of industrial drug development, from drug discovery, development, testing and clinical trials, registration and post marketing activities;
- Recognise the role and influence of regulatory bodies which controls the development, registration, manufacture and distribution of pharmaceutical products;
- Prepare and review written protocols/reports that provide a clear description of an investigation or study, associated experiments and actions taken, and provide an appropriate conclusion;
- Work effectively as an individual, in teams and in multi-disciplinary settings.