

POSTGRADUATE DIPLOMA IN INDUSTRIAL PHARMACEUTICAL SCIENCES, OPERATIONS AND MANAGEMENT

Overview

NFQ Level 9, Major Award

Exit Award only

Upon successful completion of Part I modules to the value of 60 credits, students may opt to exit the MSc (Industrial Pharmaceutical Sciences, Operations and Management) (<https://ucc-ie-public.courseleaf.com/programmes/mscips/>) and be conferred with a Postgraduate Diploma in Industrial Pharmaceutical Sciences, Operations and Management. Students taking an exit award cannot subsequently register for the remainder of the Masters.

Programme Requirements

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

Programme Requirements

Code	Title	Credits
Part I		
Students take 60 credits as follows - all listed core modules (30 credits) in Year 1; and all listed core modules (20 credits) and 10 credits of elective modules in Year 2:		
Year 1		
Students take 30 credits as follows:		
<i>Core Modules</i> ²		
MG6025	Project Management	5
PF6026	Pharmaceutical Technology and Unit Operations with Regulatory Insights	5
PF6027	Pharmaceutical GxP and Regulatory Science	5
PF6028	Process Control and Validation for Pharmaceutical Processes	5
PF6032	Bioprocessing Unit Operations	5
PF6033	Pharmaceutical Analysis and Analytics	5
Year 2		
Students take 30 credits as follows - all listed core modules (20 credits) and 10 credits of elective modules:		
<i>Core Modules</i> ²		
BU6514	Business Case for Analytics	5
MG6024	Developing Management and Leadership Skills for Organisational Effectiveness	10
PF6034	Pharmaceutical Operations	5
<i>Elective Modules</i> ¹		
Students take modules to the value of 10 credits from the following: 10		
PF6035	Lean Six Sigma for BioPharma	

PF6037 Digital Transformation and Novel Products in the (Bio)pharma Industry

Total Credits 60

¹ Taught modules will be offered on a cyclical basis over alternative years for part-time students.

² Depending on numbers, not all electives may run in a given year.

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 Postgraduate Diploma in Industrial Pharmaceutical Sciences, Operations and Management (NFQ Level 9, Major Award)

On successful completion of this programme, students should be able to:

- Design, differentiate, and execute biopharmaceutical unit processes and analytical methods in a good manufacturing practice (GMP) environment.
- Critique the theoretical aspects of quality systems, regulatory processes, and validation approaches.
- Appraise common manufacturing issues encountered in the biopharmaceutical industry using scientific problem solving and data analysis.
- Apply Lean Six Sigma, supply chain, and project management principles within an operations environment in the pharmaceutical sciences sector and beyond.
- Collaborate, lead, and manage effectively within the workplace through the application of leadership, organisational dynamics, and management theory.
- Evaluate, identify, and describe trends in digital transformation, industry 4.0 as applied to the biopharma industry (Pharma 4.0)
- Compare and contrast data and data analytics and appraise how data analytics can be used to manage and improve manufacturing processes in the biopharma industry.