## POSTGRADUATE DIPLOMA IN INDUSTRIAL PHARMACEUTICAL SCIENCES, OPERATIONS AND MANAGEMENT

## **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.