

# MSC (BIOTECHNOLOGY)

---

## Programme Learning Outcomes

**Programme Learning Outcomes for MSc (Biotechnology) (NFQ Level 9, Major Award)**

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

- Discuss the theory and practice of biomanufacturing;
- Review Molecular Biotechnology, Bioanalytical Processes, Eukaryotic-, Prokaryotic- and Plant-Biotechnologies, recombinant DNA technologies and their application in the Biotechnology and Biopharmaceutical Industries;
- Apply fundamentals in Process and Biochemical Engineering to the Biotechnology sector;
- Outline the role of Process Validation and Quality Assurance in the Biopharmaceutical Industry;
- Discuss the latest trends in good manufacturing, laboratory and validation practices;
- Complete a body of independent investigative work in a biotechnology-related area and present research findings in a minor dissertation.
- Demonstrate competency in the performance, application and documentation of biopharmaceutical-related techniques in the laboratory.