

MSc in
**Biopharmaceutical
Manufacturing**

**Industry
Experienced
Lecturers**



This 15-month Masters programme was designed in partnership with leading Irish biopharmaceutical companies to give participants the skill set required to work and be successful in the industry.

It is a full-time programme designed for individuals already employed in the Biopharmaceutical/Pharmaceutical sector.

Course Title	Credits	NFQ Level	Campus	Duration
Master of Science in Biopharmaceutical Manufacturing	90	9	Galway	15 Months



Ollscoil
Teicneolaíochta
an Atlantaigh

Atlantic
Technological
University



www.atu.ie



Student Endorsements

“This Masters course is aligned to the emerging Biopharmaceutical research and manufacturing activities in Ireland. The course offers a range of modules directly reflective of the industry requirements and gives the student a full appreciation of the end-to-end process. Studying for a Masters while working can be a daunting task for anyone, but ATU Galway City course lecturers and coordinators make it as smooth as possible.”

Ruth C., Student, ATU Galway

“I have a biochemistry background, but this course has given me knowledge about almost every aspect of the biopharmaceutical industry from Antibody engineering, genetic vaccine, validation and regulatory compliance and Six sigma. I am confident about my bright future in biopharmaceutical manufacturing.”

Amna A., Student, ATU Galway

Why Undertake this Masters?

Ireland has seen the rise of biologics manufacturing with significant capital investment resulting in the development of 20 state-of-the-art manufacturing plants.

The industry has identified a major shortage of skilled professionals to staff and run these plants.

The Programme Team has worked in consultation with industry to develop a programme which addresses the skills shortage. In addition to a number of core taught modules, and with the opportunity to select an elective from a broad range on offer, there is also a year long applied research module which will ideally be undertaken in your place of work or within an applied research centre in ATU Galway.

Learning Approach

The Masters programme will be delivered using a blended learning approach. Lectures and tutorials will be delivered live online and also recorded and available on Moodle, the university’s Learning Management System. Participants will also have the opportunity to engage in Project-based and Team-based learning.

What to Expect

Taught modules are taken over two academic semesters.

Course Content and Schedule

Winter	Spring
Advanced Biopharmaceutical Science (10 credits)	
Bioprocessing (5 credits)	Six Sigma Management (5 credits)
Design & Analysis of Experiments (5 credits)	Validation for Biopharmaceuticals (5 credits)
A year-long Applied Research Project commences at start of Spring Semester (55 credits)	

Additionally a 5 credit elective should be selected which will run in either in Semester 1 or Semester 2.

Electives	Part-time study options may be available
Biopharmaceutical Science (5 credits)	
Quality Management Systems & Regulatory Affairs (5 credits)	
Biopharmaceutical Facilities (5 credits)	
Applied Immunology, Immunotherapeutics & Vaccine Technology (5 credits)	
Machine Learning & Vision (5 credits)	

Entry Requirements

A Level 8 major award in any Biological Science or Engineering discipline. Candidates should ideally be employed in a Biopharmaceutical or similar industry and be able to undertake a year long Applied Resesarch Project (55 credits) For non-native English speakers a minimum IELTS score of 6.0 is required.

How to Apply

If you are interested in applying for this course please contact learn@gmit.ie.

I want to know more. Who can I talk to?

Dr Trish O’Connell lectures on this course. She will be happy to help you. You can contact her on: **T** +353 91 742 556 | **E** trish.oconnell@gmit.ie Or find out more at www.gmit.ie

