

College of Medicine, Nursing and Health Sciences

# MSc. in Cellular Manufacturing and Therapy

The clinical-grade production of advanced medicinal therapeutics, such as cellular therapies, is quickly evolving as the future of medicine. These therapeutics utilize immune cells, mesenchymal stromal cells or induced pluripotent stem cells to treat injured or diseased tissues. The MSc in Cellular Manufacturing and Therapy will provide scientific and practical training in the production of these cells as therapeutics for clinical application.

# **Course Facts:**

Course Level: Level 9

**Duration:** 1 year full time

Fees: http://www.universityofgalway.ie/cmtfees

Applying: http://www.universityofgalway.ie/postgraduateapplications

Closing Date: Applications are considered on a continuous, rolling basis.

**Entry Requirements:** Students must have completed a four-year biomedical science-related undergraduate degree with a minimum of 2nd Class Honours. IETLS scores should have an average of 6.5 with no less than a 6.5 in any individual component.

Employment: 89% of graduates are employed within a year of completeing the course.

Compulsory Modules (80 EC1s):	
Module:	ECTs:
Cellular Manufacturing I	10
Cellular Manufacturing II	10
Cellular Immunotherapy	10
Mesenchymal Stromal Cell Therapy	10
Induced Pluripotent Stem Cell Therapy	10
Individual Research Project and Dissertation	30

## Optional modules (10 ECTs):

Module:	CTs:
Harnessing the Basic Biology of Cancer	
for Development of Novel Therapeutics	_ 10
Gene Therapy	_10
Informatics I: Retrieval and Appraisal of Scientific	
Literature	10





### Why choose this course?

Lecture-based and hands-on instruction in GMP-grade cellular manufacturing, key advancing technologies and the regulatory process. Modules in the therapeutic application of mesenchymal stromal cells, cellular immunotherapy and induced pluripotent stem cells as the future of ATMPs. Tutoring from experts in the Centre for Cellular Manufacturing Ireland, professors coordinating international clinical trials and scientists actively researching the application of cells as biotherapeutics.



The Cellular Manufacturing & Therapy MSc gave me a clear understanding of the science behind the recent developments in cellular products and therapies, as well as the practical skills necessary to pursue research in these areas as a PhD student. The range of laboratory methods that I was taught in the course, along with the techniques I learned during my summer dissertation project, provided me with the skill set required for a PhD. I would highly recommend this MSc programme for anyone who is considering a career in research."

### Jack Schofield | PhD student



"The MSc in Cellular Manufacturing and Therapy at University of Galway is a wonderful programme providing graduates with the professional skills they require for employment in the research, development, translation and manufacturing of novel advanced therapeutic products. In particular, this course provides the laboratory-based skills and training in the techniques required for GMP-manufacturing of cell products. It delivers a solid scientific rationale underpinning the development of cellular therapies; the very skills and knowledge that I require in future employees."

### Andrew Finnerty | General Manager of Centre for Cell Manufacturing Ireland



"This course has been instrumental in leading me to my current employment within a world-renowned company. The Cell Manufacturing modules are specifically catered for supporting the necessary knowledge required for working in the cell culture and GMP industry. The Summer Placement enabled me to transfer what I had learned during the year to the reality of the industry. Worthwhile course for advancing my

Stephanie Heneghan | Assay development





@CellMfgTherapy