Employment & career opportunities

Graduates of the MSc in Biomedical Science have gone on to work within the medical technology and pharmaceutical industries, hospitals and academia. Galway is a global hub for the medical device industry so NUI Galway graduates are well-placed to avail of employment opportunities with a wide range of multi-national and indigenous medical technologies organisations.

Recent graduates have found employment with a range of companies, including Boston Scientific, Regeneron, Abbott, Allergan, and Pfizer.

Key Features

- Clear, concise understanding of the principles of the biomedical science field
- Excellent practical experience in a leading research laboratory
- Excellent employment and career opportunities in biomedical sciences industries, laboratory services, and academic research settings

Employment & career opportunities

Graduates of the MSc in Biomedical Science have gone on to work within the medical technology and pharmaceutical industries, hospitals and academia. Galway is a global hub for the medical device industry so NUI Galway graduates are well-placed to avail of employment opportunities with a wide range of multi-national and indigenous medical technologies organisations. Recent graduates have found employment with a range of companies, including Boston Scientific, Regeneron, Abbott, Allergan, and Pfizer.

Course Director: Prof Terry Smith

EU Enquiries: Dr Mary Ni Fhlathartaigh  e: mary.nifhlathartaigh@nuigalway.ie  t: +353 (0)91 495323

Non-EU Enquiries: International Affairs Office  e: international@nuigalway.ie  t: +353 (0)91 49 5277

http://www.nuigalway.ie/courses/taught-postgraduate-courses/biomedical-science.html
Eligibility, Application & Selection Process

Course level: Level 9

Duration: 1 year, full-time

Entry requirements:
- Candidates must hold at least a Second Class Honours Level 8 (or equivalent international qualification) primary degree in Science or Engineering. Candidates with a suitable primary degree without honours and three years relevant and appropriate practical experience may also be considered.
- Applicants whose first language is not English must provide evidence of English language proficiency of IELTS 6 (no band less than 5.5 in each element) or equivalent.

Places available: 18

Fees: Current fees are €6,815 (EU) €13,750 (non-EU), and are likely to remain at this level for 2016-2017.

Applying:
- Applications are made online via the Postgraduate Applications Centre (www.pac.ie/nuigalway).
- The following documentation must be supplied:
  - A Curriculum Vitae (CV)
  - A personal statement of approximately 600 words explaining why the applicant wishes to undertake the MSc Biomedical Science programme and how the programme fits into their career objectives
  - Evidence of English language competency is required for applicants whose native language is not English
  - A copy of your Birth certificate and/or passport.
  - Academic transcripts

PAC Code: GYS03

Closing date: Closing date for receipt of completed applications and all supplementary documents is June 5th.

Candidate selection: Selection of candidates is based on examination record, previous relevant experience, personal statement and performance at interview. Short-listed candidates are invited for interview in June/July.

Student Testimonial

Nala Shologu
MSc Biomedical Science graduate currently pursuing a PhD in the Discipline of Anaesthesia and Lung Biology Group, NUI Galway.

“I found the Biomedical Science course particularly interesting and exciting because it demonstrated how research and scientific technological developments can impact on biological systems, disease diagnostics and novel therapeutics. Integrated modules such as tissue engineering and biomaterial science provided immense insight into the use of gene therapy, stem cells and materials engineering approaches to critical problems in modern medicine. I really liked the flexibility of the modular structure as it allowed me to specialise in the areas of investigative biomedical science that interested me. In addition to building fond memories with my classmate, I was privileged in having the opportunity to build contacts with other passionate scientist from various backgrounds.”

Programme Outline & Structure

Core Modules:

Research Project
A 4-month laboratory project with an academic research team on a subject related to biomedical science.

Introduction to Business
This module focuses on the fundamental concepts of marketing, management and accountancy and their application in Irish and international business situations. Teams of students develop a business plan for a start-up biomedical science enterprise.

Materials, Science & Biomaterials
This module addresses the fundamental properties and applications of biomaterials (synthetic and natural) that are used in contact with biological systems.

Tissue Engineering
This module integrates the principles and methods of engineering and life sciences towards the fundamental understanding of structure-function relationships in normal and pathological mammalian tissues.

Regulatory Compliance in Healthcare Manufacturing
This module focuses on the validatory requirements within the bio-, pharmaceutical and chemical industries.

Molecular Medicine
This module outlines the molecular mechanisms underlying diseases including cancer, diabetes, immuno-deficient and neurodegenerative disorders.

Scientific Writing
This module aims to provide students with an in-depth understanding of the process of scientific publication (writing, reviewing articles and responding to journal editors).

Cell & Molecular Biology: Advanced Technologies
(Core for non-biologists, Optional for biologists)
This module outlines the fundamentals of cell and molecular biology.

Radiation & Medical Physics
(Core for biologists, Optional for non-biologists)
The module reviews the basic nuclear physics alluding to radiation applications in industry and its biological interactions.

Optional Modules:

Fundamental Concepts in Pharmacology
This module introduces students to fundamental pharmacological concepts of pharmacodynamics and pharmacokinetics of drug interactions in the body.

Human Body Structure
This module develops knowledge of human anatomy in the context of biomedical science.

Introduction to Bioinformatics
This module provides biology students with good foundation knowledge of bioinformatics and enables them to perform basic bioinformatic tasks. Ultimately students will develop an appreciation how bioinformatic tools are fundamental to modern medicine.

Protein Technology
Topics include industrial scale-up of protein production, proteomics and glycobiology.

*Please note that the curriculum information is subject to change from year to year.