Neuroscience

CAO code: DN200 Option: Biological, Biomedical and Biomolecular Science (BBB)

Sample pathway for a degree in Neuroscience *

YEAR 1 — ENGAGE WITH THE PRINCIPLES

BIOLOGY *Modules include:*
- Biology in Action
- Life on Earth
- Cell Biology & Genetics
- Biomedical Sciences

CHEMISTRY *Modules include:*
- The Basis of Organic and Biological Chemistry

MATHEMATICS *Modules include:*
- Mathematics for the Biological & Chemical Sciences

- One Elective Module
- One Small-Group Project

YEAR 2 — CHOOSE YOUR SUBJECTS

The subject combinations listed below are illustrative of what a student who graduates in Neuroscience could choose in Year 2. Further subject combinations are possible depending on the choices in Year 1. Further information is available on page 19.

NEUROSCIENCE *Modules include:*
- Chemistry for Biologists
- Molecular Genetics and Biotechnology
- Biomolecular Laboratory Skills
- Metabolic and Immune Systems
- Principles of Neuroscience

BIOCHEMISTRY & MOLECULAR BIOLOGY *Modules include:*
- Principles of Biochemistry

PHARMACOLOGY *Modules include:*
- Biomedical Science of Drugs

GENETICS *Modules include:*
- Principles of Genetics

- Two Elective modules

YEAR 3 — FOCUS ON YOUR CHOSEN SUBJECT

NEUROSCIENCE – *Modules include:*
- Cell Signalling
- Drugs used in CNS diseases
- Nervous System Development
- Membrane Biology
- Biostatistics
- Sensory Neuroscience
- Genetic Basis of Disease
- Higher Cortical Function
- Two Elective modules

YEAR 4 — REFINE YOUR KNOWLEDGE

NEUROSCIENCE – *Modules include:*
- Neuroscience Research Project
- Synaptic Plasticity
- Advanced Topics in Neural Development
- Advanced Neuropharmacology
- Advanced Neurochemistry
- Molecular Neuroimmunology
- Genetics of Disease & Behaviour
- Synaptic Signalling
- Emerging Therapies

BSc (Honours) Neuroscience

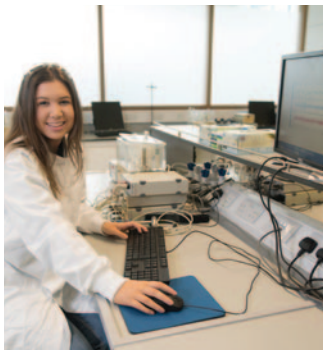
MSc (Taught)
- MSc Biotechnology
- MSc Biotechnology & Business
- MSc Biotherapeutics
- MSc Biotherapeutics & Business

PhD
- Students can pursue a PhD in universities in Ireland or abroad in Neuroscience or in areas as diverse as biotechnology, cell biology, biomedical and health science.

Industry
- Biotechnology companies
- Hospital laboratories
- Forensic Science laboratories
- Pharmaceutical companies

Conversion Courses
- Professional Master of Education (PME)
- Graduate Veterinary Medicine
- Graduate Medicine
- Master of Management

**See pages 4 and 5 for information on the terminology used above. Potential combinations shown here are examples only and are not guaranteed by UCD. Modules are subject to change each year.*



Shauna Corry analysing the results of a knee-jerk reflex test in a Neuroscience laboratory.

- Learn how to employ state-of-the-art techniques to study the nervous system at the molecular, cellular and behavioural levels

"I have always known that Science is my passion, but it wasn't until I had the opportunity to explore the subject in a hands-on environment that I realised how much I love Neuroscience. I was intrigued straight away by the brain, and by how much is still to be discovered. I am a member of the UCD Lacrosse Club, I volunteered in Tanzania with UCD Volunteers Overseas and I work as a Residential Assistant on campus. The great thing about UCD is being able to study electives, so I was able to study French, Spanish, Astronomy and Psychology as well as all my Science modules. When I graduate, I hope to work in research, particularly on developing treatments for brain disorders."

Shauna Corry, Student

Associate Professor Oliver Blacque
UCD School of Biomolecular and Biomedical Science

oliver.blacque@ucd.ie
facebook.com/UCDScience
twitter.com/ucdscience

V1 2021

www.ucd.ie/myucd/neuroscience