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

Sample pathway for a degree in Neuroscience *

**YEAR 1**

**ENGAGE WITH THE PRINCIPLES**

<table>
<thead>
<tr>
<th>BIOLOGY</th>
<th>CHEMISTRY</th>
<th>MATHEMATICS</th>
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<tbody>
<tr>
<td>Modules include:</td>
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<td>Modules include:</td>
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<tr>
<td>Biology in Action</td>
<td>The Basis of Organic and Biological Chemistry</td>
<td>One Elective Module</td>
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<tr>
<td>Life on Earth</td>
<td></td>
<td>One Small-Group Project</td>
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<tr>
<td>Cell Biology &amp; Genetics</td>
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<tr>
<td>Biomedical Sciences</td>
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**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 Modules include:
- Principles of Biochemistry

PHARMACOLOGY Modules include:
- Biomedical Science of Drugs
- 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 Neurosciences
- 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
- Two Elective modules

**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.
  - Biotechnology companies
  - Hospital laboratories
  - Forensic Science laboratories
  - Pharmaceutical companies
- 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.

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

www.ucd.ie/myucd/neuroscience