

BSC (HONS) CHEMICAL PHYSICS

Overview

Status: Active

National Framework Of Qualifications (NFQ) Level: 8

NFQ Award Class: Major Award

Duration Full Time: 4 Academic Year(s)

Total Credits: 240

Delivery Method: In-Person

Connected Curriculum:

- Civic and Community Engagement
- Employability
- Inter-and Transdisciplinary
- Research Based Teaching
- Sustainability

Sustainable Development Goals (SDGs):

- Affordable and Clean Energy
- Decent Work and Economic Growth
- Industry, Innovation, and Infrastructure
- Responsible Consumption and Production
- Climate Action
- Good Health and Well-being
- Sustainable Cities and Communities
- Clean Water and Sanitation

Graduate Attributes:

- Creator, evaluator and communicator of knowledge
- Digitally Fluent
- Independent and creative thinker
- Socially Responsible

Work-Integrated Learning (Including Placement):

No

Eligibility

Students entering via the Chemical Sciences (<https://ucc-ie-public.courseleaf.com/programmes/bccm/>) (CK406) stream must take modules from Option 2 in first year. Students entering via the Physics and Astrophysics (<https://ucc-ie-public.courseleaf.com/programmes/bscpy/>) (CK408) stream must take either the CM1006 or CM1007 modules.

Quotas

Students who opt to enter will be offered places in order of merit based on their average mark across compulsory modules in physics (PY1052 and PY1053) and in chemistry (CM1200 and CM1201 in CK406; CM1006 or CM1007 in CK408) in the First Year Examination. In filling the quotas, places will be given to students passing the First University Examination in Science in the first year of registration. Remaining places, if any, will

be filled in order of merit without distinction as to when the examination was completed. The decision as to the filling of such remaining places will be made after the results of the Autumn Supplemental Examination are known.

Second Year - Chemical Physics

In Second Science, students take modules from the Second Science degree programmes in physics and chemistry encompassing basic quantum physics, thermal physics and electromagnetism, as well as fundamental physical chemistry and inorganic chemistry. Two other modules are taken, one from mathematics and one from applied mathematics.

Third Year - Chemical Physics

In Third Science, students take modules from the Third Science degree programmes in physics and chemistry encompassing advanced quantum physics, statistical physics and electromagnetism, as well as chemical kinetics, spectroscopy, materials chemistry and environmental chemistry. Two other modules are taken from the mathematical sciences in modelling subjects.

BSc Ordinary Degree - NFQ Level 7, Major Award

Students who pass Third Year may choose not to proceed to Fourth Year and may opt instead to be conferred with a BSc Ordinary Degree (<https://ucc-ie-public.courseleaf.com/programmes/bccpas/>).

Fourth Year - Chemical Physics

In Fourth Year, students take **50** credits of core modules, made up of **20** credits of taught chemistry modules, **10** credits of taught core physics modules, and **10** credits each for research projects in chemistry (CY4002) and physics (CY4003). The remaining **10** credits are chosen from a list of elective physics modules.

Programme Requirements

For information about modules, module choice, options and credit weightings, please go to Programme Requirements (p.).