

BSC (HONS) PHARMACEUTICAL HEALTHCARE SCIENCES

Overview

NFQ Level 8, Major Award

The BSc (Hons) Pharmaceutical Healthcare Sciences, NFQ Level 8, is a non-pharmacy Honours degree pathway for students on the BPharm (<https://ucc-ie-public.courseleaf.com/programmes/bpharm/>) who satisfy the pass and progression standards of Third Year Pharmacy but who, following consultation with the Programme Leader, do not wish to continue with their Pharmacy degree. Such students may register instead for the non-pharmacy BSc (Hons) Pharmaceutical Healthcare Sciences, commencing in Fourth Year.

The BSc (Hons) Pharmaceutical Healthcare Sciences does not confer eligibility to practice as a Pharmacist. Neither does it allow a candidate to continue to the MPharm degree.

Programme Requirements

For information about modules, module choice, options and credit weightings, please go to Programme Requirements (p. 1).

Programme Requirements

Non-Pharmacy Exit Pathway for students not completing Third Year Pharmacy

Code	Title	Credits
Year 1 - Pharmacy		
Students take 60 credits as follows:		
<i>Core Modules</i>		
AN1075	Principles of Human Structure for Pharmacy Students	5
BC1443	Biochemistry	10
PF1009	Introduction to Pharmaceutical Chemistry	10
PF1010	Physiochemical Basis of Pharmaceuticals	5
PF1011	Pharmacy Practice I	5
PF1012	Introduction to Pharmaceutics: Formulation Science	10
PL1400	Introduction to Physiology for Pharmacy I	5
PL1401	Introduction to Physiology for Pharmacy II	5
PT1445	Foundation Pharmacology	5
Year 2 - Pharmacy		
Students take 60 credits as follows:		
<i>Core Modules</i>		
BC2443	Molecular Biology	5
MB2555	Introduction to Pharmaceutical Microbiology	10
PF2010	Professional Pharmacy Core Skills	5
PF2011	Research Methods and Applied Data Analysis	5
PF2012	Pharmaceutical Analysis	5
PF2013	Pharmaceutical Chemistry	5
PF2014	Pharmacy Practice II	5
PF2016	Pharmaceutical Technology	5

PF2017	Sterile Pharmaceutical Preparations	5
PT2448	Cellular and Molecular Basis of Drug Action and Toxicity	10

*Optional Module*¹

PF2018	Experiential Placement in a Pharmacy Setting ²	
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Year 3 - Pharmaceutical Healthcare Sciences

Students take **60** credits as follows:

PF3009	Gastrointestinal, Hepatic and Endocrine Systems	10
PF3010	Cardiovascular and Renal Systems	10
PF3012	Respiratory, Musculoskeletal and Dermatology Systems	10
PF3013	Clinical Immunology and Infection	5
PF3014	Regulatory Science	5
PF3015	Pharmacokinetics: From Basic Principles to Clinical Applications	10
PF3016	Pharmacognosy and Phytopharmaceuticals	5
PF3017	Pharmaceutical Sciences Literature Review II	5

Year 4 - Pharmaceutical Healthcare Sciences

Students take **60** credits as follows – all listed core modules (**40** credits) and **20** credits of elective modules:

Core Modules

PF4013	Clinical Practice I	5
PF4014	Central Nervous System	10
PF4015	Novel Drug Delivery	5
PF4017	Pharmaceutical Healthcare Science Project	20

Elective Modules

Students take modules to the value of **20** credits from the following, as prescribed by the School:

BC4017	Principles and Applications of Biotechnology (5)	
PF4018	Organisation and Management Skills in a Workplace Setting (10)	
PF4019	Professional Skills Development in a Workplace Setting (10)	
PT4005	Neuropharmacology (5)	

Non-Pharmacy Exit Pathway for students not completing Fourth Year Pharmacy

Code	Title	Credits
Year 1 - Pharmacy		
Students take 60 credits as follows:		
<i>Core Modules</i>		
AN1075	Principles of Human Structure for Pharmacy Students	5
BC1443	Biochemistry	10
PF1009	Introduction to Pharmaceutical Chemistry	10
PF1010	Physiochemical Basis of Pharmaceuticals	5
PF1011	Pharmacy Practice I	5
PF1012	Introduction to Pharmaceutics: Formulation Science	10
PL1400	Introduction to Physiology for Pharmacy I	5
PL1401	Introduction to Physiology for Pharmacy II	5
PT1445	Foundation Pharmacology	5
Year 2 - Pharmacy		
Students take 60 credits as follows:		

Core Modules

BC2443	Molecular Biology	5
MB2555	Introduction to Pharmaceutical Microbiology	10
PF2010	Professional Pharmacy Core Skills	5
PF2011	Research Methods and Applied Data Analysis	5
PF2012	Pharmaceutical Analysis	5
PF2013	Pharmaceutical Chemistry	5
PF2014	Pharmacy Practice II	5
PF2016	Pharmaceutical Technology	5
PF2017	Sterile Pharmaceutical Preparations	5
PT2448	Cellular and Molecular Basis of Drug Action and Toxicity	10

*Optional Module*¹

PF2018	Experiential Placement in a Pharmacy Setting	2
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Year 3 - Pharmacy

Students take **60** credits as follows:

Core Modules

PF3009	Gastrointestinal, Hepatic and Endocrine Systems	10
PF3010	Cardiovascular and Renal Systems	10
PF3011	Professional Practice III	5
PF3012	Respiratory, Musculoskeletal and Dermatology Systems	10
PF3013	Clinical Immunology and Infection	5
PF3014	Regulatory Science	5
PF3015	Pharmacokinetics: From Basic Principles to Clinical Applications	10
PF3016	Pharmacognosy and Phytopharmaceuticals	5

*Optional Module*¹

PF2018	Experiential Placement in a Pharmacy Setting	2
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Year 4 - Pharmaceutical Healthcare Sciences

Students take **60** credits as follows – all listed core modules (**40** credits) and **20** credits of elective modules:

Core Modules

PF4013	Clinical Practice I	5
PF4014	Central Nervous System	10
PF4015	Novel Drug Delivery	5
PF4017	Pharmaceutical Healthcare Science Project	20

Elective Modules

Students take modules to the value of **20** credits from the following, **20** as prescribed by the School:

BC4017	Principles and Applications of Biotechnology (5)
PF4018	Organisation and Management Skills in a Workplace Setting (10)
PF4019	Professional Skills Development in a Workplace Setting (10)
PT4005	Neuropharmacology (5)

Total Credits**240**

² Not included for progression to subsequent year and is not counted toward the final degree award. The result obtained will be recorded on the student's transcript.

³ Modules will be completed while on placement.

Examinations

Full details and regulations governing Examinations for each programme will be contained in the *Marks and Standards Book* and for each module in the *Book of Modules*.

Programme Learning Outcomes**Programme Learning Outcomes for BSc (Hons) Pharmaceutical Healthcare Sciences (NFQ Level 8, Major Award)**

On successful completion of this programme, students should be able to:

- Apply the physicochemical properties of drugs to the design of small molecules and biopharmaceutical drug delivery systems and recognise the principles of pharmaceutical manufacturing encompassing good manufacturing practice (GMP), quality assurance (QA), quality control (QC) and regulatory affairs;
- Apply the principles of chemistry underpinning the design, development, manufacture, analysis and quality control of pharmaceutical compounds and excipients;
- Outline the physiological, biochemical, molecular and genetic basis of disease, drug therapy and drug delivery;
- Apply the pharmacodynamic, pharmacokinetics and pharmacological principles underlying the use of medicines in health care;
- Recognise common minor and major disease states;
- Conduct a literature review, design a research protocol, collect and interpret data and write a dissertation;
- Identify, formulate, analyse and solve problems relating to the action, design and manufacture of pharmaceutical compounds;
- Design and carry out experiments to test hypotheses or theories in pharmaceuticals, pharmaceutical chemistry, biochemistry or pharmacology;
- Summarise all stages of the pharmaceutical manufacturing process from drug candidate selection to commercial manufacture.

¹ Students electing to take this optional module must secure a work placement relevant to the discipline, to be undertaken outside of term-time (minimum two weeks (70 hours)) subject to the approval of the School of Pharmacy.