



MSc Clinical Pharmacy

The MSc Clinical Pharmacy is a **two-year, part-time online** Master's degree designed for working pharmacists who want to **advance their clinical expertise**.

The flexible, distance-learning format enables students to learn at their own pace while engaging with expert pharmacy and medical practitioners through webinar and interactive online learning platforms. Case-based learning integrates scientific principles with professional clinical practice.

Who Should Apply?

The course is aimed at working pharmacists in hospital and community settings who want to:

- Build stronger clinical & professional skills,
- Develop specialised therapeutic knowledge,
- Take on more advanced responsibilities in patient care within the evolving healthcare system.

Graduates emerge with the skills needed to **become thoughtful leaders in clinical pharmacy services**, such as critical appraisal of drug therapies, rational drug use (including pharmacoeconomic evaluation), medication safety and management, report writing, presentation skills and research project management.

Course Outline

There are **TWO OPTIONS** available to obtain the Master's Degree:

PATHWAY I: 2 year part-time programme covering all modules.

Part 1: 60 credits taught modules (30 credits in Year 1 and 30 credits in Year 2)

For each of the areas covered in each individual module below students should be able to:

BIOSTATISTICS /CRITICAL APPRAISAL

- Demonstrate knowledge of trial designs and the statistical methods involved in evaluating study findings and apply these to specific examples.
- Demonstrate knowledge of the different types of secondary research and the statistical methods involved in evaluating study findings and apply these to specific examples.
- Demonstrate an understanding of the evidence-based medicine and its application to improving professional practice.
- Read and critically appraise a research paper and communicate findings to others (healthcare professionals/patients).

PHARMACOECONOMICS

- Apply the principles of health economics, economic modelling, QALYs and sensitivity analysis for use in the health care system.
- Apply the economic principles used to measure the cost-effectiveness of medicines to clinical practice, medical decision making and the rational use of medicines.

DRUGS AND THERAPEUTICS: SAFETY, EFFICACY AND RATIONAL USE

- Critically evaluate the benefit/risk of drugs in order to ensure the rational use of medicines.
- Identify the mechanisms of adverse drug reactions, drug-drug, drug-disease and drug-gene interactions and how they can be prevented.
- Analyse how medication errors occur, how they can be prevented and use pharmacovigilance to monitor drug safety in practice.
- Discern the clinical relevance of pharmacokinetics, therapeutic drug monitoring and pharmacogenomics in practice.
- Describe harm reduction principles in terms of substance misuse and apply these principles when providing services such as opiate agonist treatment and needle exchange services.
- Apply principles of safe, effective and rational use of drugs through performing clinical medication reviews, or medication use reviews.

PHARMACOTHERAPY

Pharmacotherapy I

Renal, Cardiovascular, Respiratory and Gastrointestinal (including liver disorders).

Pharmacotherapy II

Endocrinology, CNS (Psychiatry/Neurology), Musculoskeletal and Infectious diseases.

Pharmacotherapy III

Paediatrics, Older Adults, Pregnancy/Breastfeeding, Assisted Reproduction, Critical Care (including surgery), Dermatological Disorders, Haematological and Malignant Conditions.

- Discuss and explain the epidemiology, aetiology, pathophysiology, signs, symptoms, and tests leading to the diagnosis of common disorders/diseases in each area.
- Choose the appropriate and effective therapy, for selected diseases of these areas
- Formulate pharmaceutical care plans and counsel patients, including those with comorbid-disease.
- Effectively communicate and justify decisions, through presentations and active participation in group discussions.

Part 2: 30 credits (Year 2)

RESEARCH PROJECT AND DISSERTATION

- Develop an understanding of the planning, execution and reporting of a research project.
- Develop problem solving skills, project management skills and presentation skills

PATHWAY II: 1 year part-time conversion programme for students who already hold a Postgraduate Diploma in Clinical Pharmacy from other recognised institutions.

Students take 45 credits of course material which includes the Research project and dissertation.



ENTRY REQUIREMENTS

PATHWAY I

- Candidates must hold a primary degree from a School of Pharmacy that is approved by the Programme Committee;
- They must be registered with the professional accreditation authority in the country in which they are practicing;
- Candidates must be employed in a health care setting;
- Candidates must have practical experience in their area of qualifications of at least one year post-registration;
- Candidates must have full access to computer and internet facilities and to be computer literate;
- Candidates may be requested to undergo an interview.

PATHWAY II

In addition to the above, applicants must have completed a Postgraduate Diploma in Clinical Pharmacy.

Contact Details

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Website Links

MSc Clinical Pharmacy
www.ucc.ie/en/ckx03



UCC Postgraduate
Application Portal
www.ucc.ie/apply

