

**Monash University - Master of Clinical Pharmacy**

The Master of Clinical Pharmacy is a 48 credit point program, equivalent to one year of full time study (generally completed in 2 years part time). It comprises 1200 hours of study. The Master of Clinical Pharmacy provides pharmacists working in clinical settings the opportunity to develop their skills in evidence based practice, quality use of medicine, practice based research and the provision of high level clinical pharmacy services. The course provides a knowledge base in core clinical pharmacy subjects. It assists students with the development of their written and oral communication skills, their ability to critically evaluate clinical literature, and to conduct practice based research.

**Assessment** occurs through a variety of different methods including: written assignments, patient pharmaceutical care plans, learning portfolios, online case discussions, oral presentations, poster presentations, clinical placements, research project and thesis, journal club presentations.

Unit	Credit Points	Unit Name	Description
ECX9720	6	Introduction Epidemiology & Biostatistics	Differences between descriptive & analytical epidemiology, strengths & weaknesses of different epidemiological study design, basic concepts & methods of biostatistics. Design & evaluation of clinical trials.
PGC5001	6	Evidence Based Practice	Theoretical information on evidence-based practice as well as skills to incorporate evidence-based medicine into clinical practice (formulation of clinical questions, searching the literature for best evidence, evaluating the evidence, and applying the evidence in patient care)
PGC5002	6	Patient Data & Pharmacotherapy I	Aspects of clinical laboratory data, monitoring patient signs and symptoms and issues in therapeutics. Topics in general medicine are covered eg. endocrinology, gastroenterology, rheumatology.
PGC6005	3	Journal Club	Journal articles reviewed according to their validity, importance and applicability; based on skills developed in PGC5001
PGC6007	3	Introduction to clinical research	Consolidate skills in performing practice based research. Topics such as: performing practice based research, writing project/grant proposals and ethics submissions, qualitative versus quantitative research, managing and analysing data.
PGC6008	6	Clinical Research II	Consolidate their skills in performing practice based research. Majority of time allocated to collection of data consistent with the methodology developed in Introduction to clinical research.
PGC6003	6	Patient Data & Pharmacotherapy II	Aspects of clinical laboratory data, monitoring patient signs and symptoms and issues in therapeutics. Specialist topics are covered in this unit eg. Cardiology, critical care, oncology.
PGC6009	3	Clinical Research III	Further consolidate research skills. Emphasis on data analysis, drawing conclusions from the research, and development of the final research report.
PGC6004	6	Patient Data & Pharmacotherapy III	Aspects of clinical laboratory data, monitoring patient signs and symptoms and issues in therapeutics. Specialist topics are covered
PGC6006	3	Speciality Clinical Placement	Opportunity to develop knowledge and skills in an area of specialty practice. Model behaviour to provide clinical pharmacy services at a high level, and to become an important member of the healthcare team in a specialty environment. Put into practice the knowledge and skills learned in Evidence based practice, Introduction to epidemiology & biostatistics, and Patient data and pharmacotherapy. Presentation of a number of case studies highlighting the pharmacist's role in patient management, and application of evidence based practice.

## Monash University – Master of Pharmacy Practice

The Master of Pharmacy Practice is a 48 credit point program, equivalent to one year of full time study (generally completed in 2 years part time). It comprises 1200 hours of study. The Master of Pharmacy Practice is designed to enable students to develop a deep and more specialised range of attributes than those able to be acquired in the undergraduate pharmacy program. Students will be able to select units related to various advanced areas of pharmacy practice, for example aspects of clinical practice, wound care, and health economics.

**Assessment** occurs through a variety of different methods including: written assignments, patient pharmaceutical care plans, learning portfolios, online case discussions, oral presentations, poster presentations,

Unit	Credit Points	Unit Name	Description
PGP5011	6 <sup>✕</sup>	Applied Pharmacy Practice I	These units explore the day-to-day practice of pharmacy including systematic problem solving, therapeutics, evidence based practice, patient monitoring and outcomes, symptomology, improving adherence, multiple medication management, pharmaceutical care, standards and competencies for pharmacy practice, ethics, legal aspects, multidisciplinary approaches to health care, primary care, over the counter medicines, communication and counselling, public health, pharmaceutical calculations, risk management and dealing with difficult clients.
PGP5012	6 <sup>✕</sup>	Applied Pharmacy Practice II	
PGP5015	6 <sup>✕</sup>	Geriatric Pharmacy Practice	The unit will help students develop specialist knowledge and skills in geriatric pharmacy practice and medication management reviews. The unit explores medication management for elderly patients in community, residential aged care and hospitals settings, through readings, case studies, online small group discussions and fieldwork
PGP5016	6 <sup>✕</sup>	Geriatric Disease State Management	The unit will help students develop specialist knowledge and skills in the management of major diseases and syndromes affecting older people. In particular it will focus on medication-related issues and the role of the pharmacist, including medication management reviews in patients with these conditions.
PGP5017	Choose at least 12 CP	Mental Health	The Mental Health unit covers the aetiology, pathophysiology, diagnosis, treatment and monitoring of common mental health problems (anxiety & obsessional disorders, depression, schizophrenia, bipolar disorders, etc). The unit will focus particularly on medication management issues in patients with these conditions and the pharmacist's role in managing these patients. The unit will also give an overview of the mental health care system in Australia.
PGP5018		Palliative Care	The unit will focus on medication management issues related to symptom control and the pharmacist's role in managing palliative care patients and carers. When new symptoms develop or the patient's condition deteriorates, medication is an important part of providing optimal care. Often the treatment need is immediate, but the medication may be difficult to obtain or access.
PGC6010		Infectious Diseases Pharmacotherapy	This unit will provide a broad overview or introduction to the treatment and management of infectious diseases. The focus will be on common infections seen in community and hospital settings, principles of microbiology and infectious diseases, antimicrobial use, and antimicrobial stewardship. The broad unit objectives are for students to develop and apply infectious diseases and antimicrobial use knowledge and skills in the care of patients, especially those with infections. These may be patients in the community or hospital settings. The knowledge and skills developed will be at a general level rather than at the level required for a specialist infectious diseases pharmacist.
PGC5002 PGC6003 PGC6004		Patient Data & Pharmacotherapy I, II, III	These units examine aspects of clinical laboratory data, monitoring patient signs and symptoms and issues in therapeutics (more details in MClInPharm

PGC5001	Choose remaining 12 CP	Evidence Based Practice	See previous table MCLinPharm
ECX9700/ 9710/97 20/9730/ 9750		Units in health economics	
PGC6005		Journal Club	See previous table MCLinPharm
PGC6007		Introduction to Clinical Research	See previous table MCLinPharm
PGP5013		Dermatology	Dermatology is an elective unit offered as part of the Graduate Certificate in Pharmacy Practice. Students will develop an in depth knowledge of the identification and management of common dermatological problems, especially those encountered in primary care and therefore increase their confidence in dealing with these problems
PGP5014		Clinical Educator Preparation	The overall aim of this unit is to provide a theoretical framework and support for practitioners willing to take on the important role of clinical educator (preceptor) for health care discipline undergraduates and graduates. It covers a variety of topics relating to clinical education exploring the importance clinical education has in developing professional competence in beginning health science practitioners.
PGW110 1/ 1102/11 03/1104/ 1105/11 06		Units in wound care	These units are designed to provide the knowledge and skills to enable health professionals to effectively manage acute and chronic wounds

¥ these units must be completed for the MPharmPrac to be considered for MMR accreditation.

**University of Queensland - Masters of Clinical Pharmacy**

The Master of Clinical Pharmacy is a 24 unit program and can be completed in a minimum of 3 years part-time or 18 months full-time. This program provides students with knowledge, skills and abilities to practice effectively as a clinical pharmacy practitioner involved in medicine use and pharmaceutical care; individualize, review and monitor a patient's medication regimen; demonstrate clear communication skills in clinical and non-clinical scenarios; critique and apply research methodologies relevant to clinical pharmacy practice; understand management issues in pharmacy and their relevance to clinical pharmacy practice; and describe social issues relating to medicine use. A variety of specialist practitioners, academics, expert hospital and community pharmacists teach into the program, together with medical and other health care professionals.

**Assessment** occurs through a variety of different methods including: patient pharmaceutical care profiles, clinical case presentations, written assignments, oral clinical presentations, examinations, clinical poster production and oral presentation, undertaking a drug use evaluation, clinical log books, oral teaching presentation, oral clinical viva and research project and theses.

Course	Units	Course Name	Description
PHRM 7010	2	Introduction to Clinical Pharmacy Practice	Introduces students to clinical pharmacy practice, including lab function tests, drug history taking and academic detailing.
PHRM 7021	2	Research Methods in Pharmacy	Covers concepts of basic biostatistics, clinical epidemiology, study design and methodologies such as survey research, critical literature appraisal, planning and design of research projects and health services research.
PHRM 7030	4	Pharmaco-therapeutics I	Enable pharmacist to take responsibility for the patients' drug management in the healthcare setting incorporating the limitations of EBM and its application in the individual patient. Topics include: cardiology, renal, respiratory, gastroenterology and pharmacokinetics.
PHRM 7040	2	Social Pharmacy	Includes pharmaceutical care, conflict resolution, complementary medicine, communication, psychology of disease and concordance.
PHRM 7051	2	Management Issues in Pharmacy	Human Resource Management issues including employee performance reviews, strategic and financial management in a pharmacy context. Topics include: employee recruitment, selection, induction and turnover; working in teams; leadership, entrepreneurship and innovation; ethics and corporate culture; managing organizational change; marketing professional services.
PHRM 7060	4	Pharmaco-therapeutics II	Topics include - neurology, psychiatry, cancer care, rheumatology, pediatrics, geriatrics and clinical pharmacokinetics.
PHRM 8010	2	General Pharmacy Clerkship (students undertake 2 x 40hrs clerkships)	Rotation through clinical areas; participation in rounds; clinical conferencing; case seminars; in-service education. Regular discussion with clinical and academic advisers concerning clinical decisions, patient care and drug therapy.
PHRM 7070 (7071/7072)	6	Masters Research Project	The aim of the course is to introduce students to a supervised, structured research project in an area appropriate to clinical pharmacy. Students are involved with all aspects including design, study execution, data collection and data analysis.

**University of South Australia - Masters of Clinical Pharmacy**

The Master of Clinical Pharmacy program is a 54 unit program (18 months full time equivalent) that aims to prepare Clinical Pharmacists capable of providing specialist pharmaceutical services in hospitals and other clinical environments, thereby enhancing the quality use of medicine. Graduates will be able to take a leading role in the decision making process of drug and drug product selection for individual patients, provide specialist drug information and education programs to patients and health care providers, effectively monitor a patient's therapy and critically evaluate clinical research. The program comprises 36 core units that provide the basic skills for clinical pharmacy practice, followed by intensive pharmacotherapeutics/medication management instruction. The final 18 units of the program comprise a choice of electives involving practical application of clinical pharmacy skills in a practice environment, research skills, critical thinking, epidemiology, evidence based medicine or negotiated study

Course	Units	Course Name	Description
PHAR5042	4.5	Advanced Pharmacy Practice	Intern Training Program part 1
PHAR5051	4.5	Social and Ethical Issues in Health	Intern Training Program part 2
PHAR5043	4.5	Advanced Pharmacotherapeutics 1	Theoretical and case based instruction on the pathophysiology and treatment of disease states; Cardiology and infectious diseases
PHAR5044	4.5	Advanced Pharmacotherapeutics 2	Theoretical and case based instruction on the pathophysiology and treatment of disease states; Neurology and Psychiatric Illness
PHAR5045	9	Advanced Pharmacotherapeutics 3	Theoretical and case based instruction on the pathophysiology and treatment of disease states; Oncology, Rheumatology, Critical care, Pain and Palliative Care, Clotting disorders, Anaemias and Endocrine
PHAR5046	9	Advanced Pharmacotherapeutics 4	Theoretical and case based instruction on the pathophysiology and treatment of disease states; Dermatology, Gastroenterology, Complimentary medicines, Respiratory, Geriatric principles (most diseases covered in other modules), Paediatrics, Renal diseases Glaucoma
PHAR5050	9	Medicine Management Clerkship	Requires the student to integrate the skills and knowledge gained in previous modules and demonstrate practical application in a practice setting and demonstrate the ability to provide a complete clinical pharmacy service to patients and staff in a clinical environment. Collect and present at least 20 cases from adult hospital inpatients reflecting the disease states listed in the case book then present to the preceptor/reviewer
MATH5028 REHB5102 HLTH5141 HLTH5131 HLTH5145 HLTH5146 HLTH5147	9	Electives	Choice of Research methods & Biostatistics; Allied Health Evidence Based Theory & Practice; Critical thinking & reasoning in health; Introductory epidemiology, negotiated studies