

# POSTGRADUATE DIPLOMA IN PHARMACEUTICAL SCIENCES

PGDip (Pharmaceutical Sciences) - NQF Level 8 (120 credits)

**Qualification code: PDPS21**

SAQA ID: 111128, CHE NUMBER: H/H16/E165CAN

Campus where offered: Arcadia Campus

## REMARKS

- a. *Admission requirement(s):*  
Any relevant NQF Level 7 Health- or Pharmaceutical Sciences-related degree with two years' work experience, **or** an Advanced Diploma in Pharmaceutical Sciences, **or** a Professional Bachelor's degree in Pharmacy. Preference will be given to applicants with an average of 60% or more in the previous qualification.
- Holders of any other equivalent South African or international qualification may also be considered, see Chapter 1 of Students' Rules and Regulations.
- b. *Selection criteria:*  
Admission is subject to selection. Prospective students will be evaluated based on the marks obtained in the previous qualification and/or work experience.
- Acceptance is subject to available capacity according to the Student Enrolment Plan (SEP). Applicants will be informed of their status per official letter from the Office of the Registrar, alternatively, they can check their application status on the TUT website, [www.tut.ac.za](http://www.tut.ac.za).
- c. *Recognition of Prior Learning (RPL), equivalence and status:*  
See Chapter 30 of Students' Rules and Regulations.
- d. *Intake for the qualification:*  
January only.
- e. *Presentation:*  
Block-mode classes offered over a period of two years.
- f. *Minimum duration:*  
A minimum of one or two years (depending on the programme offering).
- g. *Exclusion and readmission:*  
See Chapter 2 of Students' Rules and Regulations.
- h. *Re-registration:*  
A student may re-register for the module Research Project only with the permission of the Head of the Department. The purpose of the re-registration is to provide students with an opportunity to complete the project only, and not to redo it, should they fail the module.

## CURRICULUM

### FIRST YEAR

CODE	MODULE	NQF-L	CREDIT
RLS108G	Research Methodology in Life Sciences	(8)	(12)
<b>plus one of the following electives:</b>			
CRS108G	Clinical Research	(8)	(42)



MRS108G Medicines Regulatory Science (8) (42)

TOTAL CREDITS FOR THE YEAR: 84

## SECOND YEAR

CODE	MODULE	NQF-L	CREDIT
BEB108G	Basic Applied Epidemiology and Biostatistics	(8)	(12)
HAM108G	Health Care Administration Management II	(8)	(12)
HEC108G	Health Economics	(8)	(12)
RJP108G	Research Project	(8)	(30)
RJP108R	Research Project (re-registration) (first-year module, see paragraph h)	(8)	(0)
TOTAL CREDITS FOR THE YEAR:			36
TOTAL CREDITS FOR THE QUALIFICATION:			120

## MODULE INFORMATION (OVERVIEW OF SYLLABUS)

The syllabus content is subject to change to accommodate industry changes. Please note that a more detailed syllabus is available at the Department or in the study guide that is applicable to a particular module. At time of publication, the syllabus content was defined as follows:

### B

#### **BASIC APPLIED EPIDEMIOLOGY AND BIostatISTICS (BEB108G) CONTINUOUS ASSESSMENT** *(Module custodian: Department of Pharmaceutical Sciences)*

This module includes an understanding of, and an ability to apply and evaluate, the key terms, concepts, facts, principles, rules, theories, legislation and guidelines both nationally and internationally within the context of the development processes and post marketing surveillance of small molecule medicines, biological and biotechnological products in advanced drug delivery systems, complementary medicines and devices; research methods and biostatistics, health systems management, health economics, the key terms, concepts, facts, principles, rules and theories, research methodologies, methods and techniques relevant to the field of epidemiology and biostatistics and clinical research; interrogate multiple sources of knowledge in the medicines development and control process; appropriate standard procedures, processes or techniques in clinical research and epidemiology and biostatistics; ethical issues, ethical and professional values and approaches within the clinical research and epidemiology and biostatistics field; the information gathering process, the synthesis of data, evaluation and management of data in the specialised contexts of clinical research and epidemiology and biostatistics. (Total notional time: 120 hours)

### C

#### **CLINICAL RESEARCH (CRS108G) CONTINUOUS ASSESSMENT** *(Module custodian: Department of Pharmaceutical Sciences)*

This module prepares students to demonstrate knowledge of and engagement in an area at the forefront of clinical research, and an understanding of the theories, research methodologies, methods and techniques relevant to clinical research, discipline or practice; and an understanding of how to apply such knowledge in a particular context. The module covers a wide range of topics associated with designing clinical trials, developing and writing clinical trial protocol, planning and conducting clinical trials and interpreting safety and efficacy data: developing methods for clinical trial design, an understanding of the theories, research methodologies, methods and techniques as well as the general considerations relevant to the design of clinical trials in a South African as well as international context; the key terms, concepts, facts and principles in the writing of a clinical trial protocol; the planning and application of special types of clinical trials, the different steps in the planning and conducting a single clinical trial; safety and efficacy data in a clinical trial; and problems of clinical data interpretation. (Total notional time: 420 hours)



## H

### **HEALTH CARE ADMINISTRATION MANAGEMENT II (HAM108G) CONTINUOUS ASSESSMENT** **(Module custodian: Department of Management and Entrepreneurship)**

The student will be able to demonstrate forefront knowledge and the application of strategic management processes, different management models, importance and utilisation of human resources within a health care environment; different models of business functions within a health care environment; risk and quality improvements within a health care environment; methods and strategies to improve the labour related issues within a health care environment. (Total notional time: 120 hours)

### **HEALTH ECONOMICS (HEC108G) CONTINUOUS ASSESSMENT** **(Module custodian: Department of Pharmaceutical Sciences)**

This module contributes to an the integral area of pharmacoeconomics, management of pharmacy services, outcomes research, product planning and reimbursement, cost-benefit analysis and risk management of assessing and providing medicines for use in the market. It covers economics and health economics, the key terms, concepts, facts, principles, rules and theories in pre-clinical research; the concept of a market, supply and demand, efficiencies of markets for medicine use; cost terms in economic evaluations and pharmacoeconomic evaluation of medicines and medical treatment; and different methodologies used in evaluating medicine use outcomes. (Total notional time: 120 hours)

## M

### **MEDICINES REGULATORY SCIENCE (MRS108G) CONTINUOUS ASSESSMENT** **(Module custodian: Department of Pharmaceutical Sciences)**

This module prepares the student to integrate and apply detailed pharmaceutical science knowledge in the medicines regulatory science and governance process. A wide range of topics associated with role of the pharmaceutical regulatory scientist, the South African legislative process and key concepts in the process of law making; key concepts of Medicines and Related Substances Act, 1965 (Act No. 101 of 1965); the Pharmacy Act, 1974 (Act No. 53 of 1974) (Consolidated)); the international pharmaceutical arena and the impact on S.A. regulatory practice; the classification of medicinal products and complementary and alternative medicines (CAMs); requirements for medicine registration in S.A.; the South African Common Technical Document (CTD) Guidelines as well as the SAHPRA post-registration processes. (Total notional time: 420 hours)

## R

### **RESEARCH METHODOLOGY IN LIFE SCIENCES (RLS108G) CONTINUOUS ASSESSMENT** **(Module custodian: Department of Pharmaceutical Sciences)**

This module is aimed at providing students with the knowledge, skills and applied competencies to engage in life sciences research and be at the forefront of research in the field of life sciences. The module thus focuses on the development of a critical understanding and the ability to reflect on the importance of research, the various research tools available to the life sciences, research management, research ethics in life sciences, research proposal writing, research approaches and procedures, evaluation of research data and the effective presentation of research to peers applying and using the appropriate rules, skills and technology. (Total notional time: 120 hours)

### **RESEARCH PROJECT (RJP108G/R) PROJECT ASSESSMENT** **(Module custodian: Department of Pharmaceutical Sciences)**

This module will provide the student with the ability to investigate physical, emotional and social aspects to improve quality of life, symptom surveillance and patient interventions, to develop systems for tracking trends in life-threatening illness symptoms and symptom management; Perform a pilot project on a small scale to prepare the student for a full-scale research project when advancing to the Master of Health Sciences: Identify and plan a research project, write a research proposal (motivation and rationale, aim and objectives, literature study, materials and methods, expected outputs, budget, planning schedule, results and discussion, conclusion, references), an oral presentation of proposal, execute a pilot study as planning for a Master's degree, write a final research report, present an oral presentation of final report, present a research poster. (Total notional time: 300 hours)

