

POSTGRADUATE DIPLOMA IN MULTIMEDIA COMPUTING

PGDip (Multimedia Computing) - NQF Level 8 (120 credits)

Qualification code: PDMC21

SAQA ID: 111269, CHE NUMBER: H/H16/E185CAN

Campus where offered:

Soshanguve South Campus

REMARKS

a. Admission requirement(s):

An Advanced Diploma in Multimedia Computing, **or** a Baccalaureus Technologiae: Information Technology in the field of Multimedia, **or** a bachelor's degree in the field of Multimedia, **or** an equivalent qualification at NQF Level 7 with a minimum of 120 credits. Preference will be given to candidates who obtained an average of 60% 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 based on a personal interview with a departmental selection panel. Candidates are evaluated based on the previous qualification obtained 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.

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:

Day classes offered on Saturdays over a period of two years. Online classes are also offered in some instances, but assessments are on campus.

f. 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 Multimedia 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.

i. Personal equipment:

Access to a laptop or desktop computer is essential to participate in multimodal learning experiences as well as to complete assignments and projects. NSFAS students receive an allowance to acquire a laptop, and using this allowance for this purpose is critical for academic success. Students are encouraged to consult the faculty website where the minimum requirements for specific programmes are published.



CURRICULUM

ATTENDANCE (FIRST OR SECOND YEAR)

Modules are offered as determined by the Head of the Department.

CODE	MODULE	NQF-L	CREDIT	PREREQUISITE MODULE(S)
MRP108G	Multimedia Research Project	(8)	(30)	Research Methodologies
MRP118R	Multimedia Research Project (re-registration) (first-semester module, see paragraph h)	(8)	(0)	

FIRST SEMESTER

RMC118G	Research Methodologies	(8)	(15)	
VED118G	Virtual Environment Design	(8)	(15)	

SECOND SEMESTER

VEA118G	Virtual Environment Application	(8)	(15)	
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plus three of the following electives:

First semester

AIG118G	Artificial Intelligence Games Programming	(8)	(15)	Artificial Intelligence
NTT118G	New Technological Trends	(8)	(15)	

Second semester

ARI118G	Artificial Intelligence	(8)	(15)	
CGH118G	Computer Graphics	(8)	(15)	
FRD118G	Formal Aspects of Computing	(8)	(15)	

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:

A

ARTIFICIAL INTELLIGENCE (ARI118G)

CONTINUOUS ASSESSMENT

(Module custodian: Department of Computer Science)

The focus of this module is to lay the foundation for the design of artificial intelligence systems on different computing platforms. (Total notional time: 150 hours)

ARTIFICIAL INTELLIGENCE GAMES PROGRAMMING (AIG118G)

CONTINUOUS ASSESSMENT

(Module custodian: Department of Computer Science)

The focus of this module is to lay the foundation for the implementation of artificial intelligence systems on different computing platforms. (Total notional time: 150 hours)



C**COMPUTER GRAPHICS (CGH118G)****CONTINUOUS ASSESSMENT***(Module custodian: Department of Computer Science)*

The focus of this module is to introduce the student to the mathematics behind signal processing and its implementation to different platforms such as the web and mobile devices. (Total notional time: 150 hours)

F**FORMAL ASPECTS OF COMPUTING (FRD118G)****CONTINUOUS ASSESSMENT***(Module custodian: Department of Computer Science)*

This module prepares the student to use formal methods as a tool in the development of a set of modelling notations that allow software architects to precisely specify the structure, behaviour and properties of the critical aspects of a system. (Total notional time: 150 hours)

M**MULTIMEDIA RESEARCH PROJECT (MRP108G, MRP118R)****PROJECT ASSESSMENT***(Module custodian: Department of Computer Science)*

The focus of this module is to enable students to apply and implement the research principles acquired in the Research methodologies module on a proposed research topic. (Total notional time: 300 hours)

N**NEW TECHNOLOGICAL TRENDS (NTT118G)****CONTINUOUS ASSESSMENT***(Module custodian: Department of Computer Science)*

The purpose of this module is to expose students to the trends in the evolution and continuing developments in the field of Computing and its associated academic disciplines, including Computer Science, Information Systems, Information Technology and Multimedia Computing. (Total notional time: 150 hours)

R**RESEARCH METHODOLOGIES (RMC118G)****CONTINUOUS ASSESSMENT***(Module custodian: Department of Computer Science)*

The focus of this module is to introduce a student to research methods, planning, management, ethics, legal, and professional issues, and also how write scientific research articles and theses/dissertations. (Total notional time: 150 hours)

V**VIRTUAL ENVIRONMENT APPLICATION (VEA118G)****CONTINUOUS ASSESSMENT***(Module custodian: Department of Computer Science)*

The purpose of this module is to teach students how to develop virtual environment applications effectively. This module will improve the student's understanding of how virtual reality systems should be developed for integrated headsets and mobile platforms. (Total notional time: 150 hours)

VIRTUAL ENVIRONMENT DESIGN (VED118G)**CONTINUOUS ASSESSMENT***(Module custodian: Department of Computer Science)*

This module will improve the student's understanding of how virtual reality systems work, what limitations they have, and what can be done to improve them. (Total notional time: 150 hours)

