

## POSTGRADUATE DIPLOMA IN MULTIMEDIA COMPUTING

Qualification code: PDMC21 - NQF Level 8 (120 credits)

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 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](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:*

Day classes offered on Saturdays over a period of two years.

f. *Duration:*

A minimum of one or two years (depending on the programme offering).

g. *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.

h. *Exclusion and readmission:*

See Chapter 2 of Students' Rules and Regulations.

### CURRICULUM

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

#### ATTENDANCE 2021

CODE	MODULE	NQF-L	CREDIT	PREREQUISITE MODULE(S)
<b>FIRST SEMESTER</b>				
VED118G	Virtual Environment Design	(8)	(15)	
RMC118G	Research Methodologies	(8)	(15)	



## SECOND SEMESTER

VEA118G Virtual Environment Application (8) (15)

**plus three of the following modules:**

### First semester

AIG118G Artificial Intelligence Games Programming (first-semester module) (8) (15) Artificial Intelligence

NTT118G New Technological Trends (first-semester module) (8) (15)

### Second semester

ARI118G Artificial Intelligence (second-semester module) (8) (15)

CGH118G Computer Graphics (second-semester module) (8) (15)

FRD118G Formal Aspects of Computing (second-semester module) (8) (15)

## ATTENDANCE 2022

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 g)	(8)	(0)	

**plus three of the following electives if not already completed in the first year:**

### First semester

AIG118G Artificial Intelligence Games Programming (first-semester module) (8) (15) Artificial Intelligence

NTT118G New Technological Trends (first-semester module) (8) (15)

### Second semester

ARI118G Artificial Intelligence (second-semester module) (8) (15)

CGH118G Computer Graphics (second-semester module) (8) (15)

FRD118G Formal Aspects of Computing (second-semester module) (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) 1 X 4-HOUR COMPUTER-BASED**  
(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 tuition time: not available)

**ARTIFICIAL INTELLIGENCE GAMES PROGRAMMING (AIG118G) 1 X 4-HOUR COMPUTER-BASED**  
(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 tuition time: not available)

### C

**COMPUTER GRAPHICS (CGH118G) 1 X 4-HOUR COMPUTER-BASED**  
(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 tuition time: not available)

### F

**FORMAL ASPECTS OF COMPUTING (FRD118G) 1 X 4-HOUR COMPUTER-BASED**  
(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 tuition time: not available)

### 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 tuition time: not available)

### N

**NEW TECHNOLOGICAL TRENDS (NTT118G) 1 X 4-HOUR COMPUTER-BASED**  
(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 tuition time: not available)

### 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 write scientific research articles and theses/dissertations. (Total tuition time: not available)



**VIRTUAL ENVIRONMENT APPLICATION (VEA118G)****1 X 4-HOUR COMPUTER-BASED****(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 tuition time: not available)

**VIRTUAL ENVIRONMENT DESIGN (VED118G)****1 X 4-HOUR COMPUTER-BASED****(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 tuition time: not available)

