CENTRAL UNIVERSITY OF TECHNOLOGY, FREE STATE
SENTRALE UNIVERSITEIT VIR TEGNOLOGIE, VRYSTAAT
YUNIVESITHI E BOHARENG YA THEKENOLOJI, FOREISTATA

Department of Information Technology

INSTRUCTIONAL OFFERING: **ADVANCED DEVELOPMENT SOFWARE IV**
ADS42AB

INSTRUCTIONAL PROGRAM: **B. TECH INFORMATION TECHNOLOGY**

EXAMINATION: **NONE (Continuous Evaluation)**

-SYLLABUS-

1. 3D Mobile Games Programming for the Android Environment

-EXPANDED SYLLABUS-

Assessment	4 assignments/tests (40%) & 1 project (60%)
Credits	12
NQF Level	7
Type of learning	Continuous Evaluation

UNIT	SPECIFIC OUTCOME	ASSESSMENT CRITERIA	CREDITS	NOTIONAL HOURS	WEEKS
1	Demonstrate an understanding OpenGL ES	1. Discuss how Vertices are to be used in three-dimensions 2. Investigate Perspective projection, meshes and matrices.	2	20	2
2	Demonstrate the ability to develop a small application by implementing three-dimensional programming techniques	1. Create a small application in order to understand the implementation of OpenGL ES 2. Critically investigate some of the common programming techniques used in three-dimensional software development • Vectors • Lighting • Mip-mapping	2	20	2

		• Cameras • Models • Collisions			
3	Demonstrate an understanding of the design of OpenGL ES applications	1. Create a small application in order to understand the design of OpenGL ES applications 2. Critically investigate the components that comprise an OpenGL ES application	2	20	2
4	Demonstrate an understanding of publishing a mobile application and incorporating social features	1. Discuss the various methods available to publish mobile applications 2. Investigating how social, location, and multiplayer can be incorporated into mobile applications	2	20	2
5	Demonstrate an understanding of all concepts covered by completing various assignments and a large project.	1. Assignments. 2. Project.	4	40	4