



Central University of
Technology, Free State

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

Department of Information Technology

INSTRUCTIONAL OFFERING: Internet Programming IV IPE41AB
INSTRUCTIONAL PROGRAM: BTECH INFORMATION TECHNOLOGY

Assessment	Continuous Evaluation
Credits	12
NQF Level	7
Type of learning	Summative

-SYLLABUS-

1. HTML 5 Game Development using the Construct 2 game engine

-EXPANDED SYLLABUS-

- Understanding of the “Construct 2” visual development environment:
 - The Interface
 - The Project Structure
- Understanding and be able to use the **primitives** (basic elements) of game projects:
 - Projects
 - Layouts
 - Layers
 - Objects
 - Plugins, Object types, Instances, Instance variables, Behaviors, Effects, Families, Containers
 - Events
 - How events works, Event sheets, Conditions, Actions, Expressions, Sub-Events, Groups, Comments, Includes, Variables, Breakpoints, Files, Sound and Music
- Understand and apply the different **behaviors** to game objects:
 - 8 direction, Anchor, Bound to Layout, Bullet, Car, Custom movement, Destroy outside layout, Drag and Drop, Fade, Flash, Jump-thru, Line of sight, No Save,

Pathfinding, Persist, Physics, Pin, Platform, Rotate, Scroll to, Shadow caster, Sine, Solid, Timer, Turret, Wrap

- Understanding and apply best practices for developing games.
- Implementation of various game primitives and behaviors in different kinds of games like “Shooter”, “Puzzle” and “Platform” games.
- Deploying of HTML 5 games to different platforms.