

## ISCG7441: Advanced Game Programming

Course number: ISCG7441 Level: 7 Credits: 15  
Main programme: BCS Delivery: One Semester (Full-time)

Endorsement: Elective Hours directed: 39  
Other programmes: GDCMP Hours self-directed: 111  
Prerequisites: For BCS: ISCG6442 Total hours: 150  
For GDCMP: ISCG6442 or  
as approved by the  
Programme Leader

Co-requisites: n/a Number of weeks: 18 weeks (full-time)

Restrictions: n/a

### Entry requirements:

Students are expected to adhere to Unitec's policy on conduct in respect of staff, fellow students, and in the use of resources and facilities.

### NZQA Level Descriptor:

	Knowledge	Skills	Application
7	<p>knowledge of a major discipline with areas of specialisation in depth</p> <p>the analysis, transformation and evaluation of abstract data and concepts</p> <p>the creation of appropriate responses to resolve given or contextual abstract problems</p>	<p>require a command of highly specialised technical or scholastic and basic research skills across a major discipline</p> <p>involve the full range of procedures in a major discipline</p> <p>are applied in complex, variable and specialised contexts</p>	<p>in planning, resourcing and managing processes</p> <p>within broad parameters and functions with complete accountability for determining, achieving and evaluating personal and/or group outcomes</p>

Course aim: to provide students with the ability to investigate and use advanced programming techniques to solve complex game development problems.

### Learning outcomes:

1. Utilise, review, and enhance graphical and animation techniques to support game projects.
2. Utilise, review, and enhance physics and mathematical techniques to support game projects.
3. Document, create, and test a video game prototype or proof of concept.
4. Document a post-mortem of findings regarding the rapid prototype.