

## Academic Staff

These are the people who lecture the courses and supervise research.

## Head of Department

Ken MacGregor MSc Glasgow

## Professors

Edwin Blake PhD London

Pieter Kritzinger PhD Waterloo

## Adjunct Professors

Andrew Hutchison PhD Zurich

## Associate Professors

Sonia Berman PhD UCT

Gary Marsden PhD Stirling

## Senior Lecturers

Antoine Bagula PhD KTH

James Gain PhD Cantab

Michelle Kuttel PhD UCT

Hanh Le PhD UTS

Patrick Marais MSc UCT DPhil Oxon

Audrey Mbogho PhD New York City

Hussein Suleman PhD Virginia Tech

## Lecturers

Gary Stewart BSc (Hons) UCT

## How do I apply?

Look at the UCT website:

(<http://www.uct.ac.za>) at the links for "Applying to UCT".

**Qualifications Needed:** You need Matric with Maths and another science. Details can be found at [www.uct.ac.za/apply/criteria/undergraduates/science/](http://www.uct.ac.za/apply/criteria/undergraduates/science/).

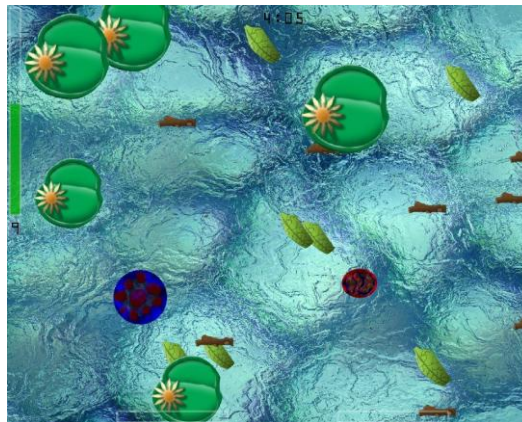
**Forms:** Complete the application forms: [www.uct.ac.za/apply/applications/forms/](http://www.uct.ac.za/apply/applications/forms/) (Start with Form 1 ...) Once you have submitted the form you can follow your application online.

**Admissions Office:**

Tel: 021 650 2128

Fax: 021 650 5189 / 3736

Email: [admissions@uct.ac.za](mailto:admissions@uct.ac.za)



Battle of the Blobs, UCT 2009



UNIVERSITY OF CAPE TOWN  
IYUNIVESITHI YASEKAPA • UNIVERSITEIT VAN KAAPSTAD



## Computer Game Design

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department of Computer Science

You are considering pursuing your interests in Computer Games ... now you can make it part of a good Bachelors and Honours Degree in Computer Science.

At UCT we strive to be a department of the first rank in both an International and in an African context.

## Degrees

We offer the following:

### Bachelor of Science

3-year undergraduate degree

### Bachelor of Science Honours

1-year postgraduate degree

### Masters in Computer Science

2-year research training degree

### Masters in IT

2-year conversion course

### PhD in Computer Science

3-year research degree

## Computer Game Design

Computer science is the study of anything to do with information and communications technology. In that broad field we offer a number of specializations and Computer Game Design is one of them.

In addition to a strong Computer Science Degree we offer two undergraduate semester courses on Games: one at second year and one at third year level. For the honours course a number of specialized modules are available and you can also pursue further research in the field.

Our aim is give a deep understanding of the technical side of Computer Game Design, and a broad appreciation of the roles that others, such as animators, play in the design and creation of a successful game.

## Questions

### What are the topics covered?

- 2D and 3D game technology
- AI and path planning
- C++/ Java programming (as part of the mainstream CS course)
- Microsoft XNA development
- Playability and Design
- Game Software Engineering
- Games Engine Architecture
- 2D & 3D Computer Graphics
- Multi-User and Distributed Games

### Will I be creating games?

This is a practical course: after the introduction, you begin designing and implementing games. By the end of the course you will have developed both 2D and 3D games as well as a networked game. You will also develop at least one game for XNA/Xbox.

### What can I do when I graduate?

You will be able to secure jobs within the computer games industry, as well as in general information and communications technology companies. Our degrees are also accredited by the British Computer Society.

### Could I study further after I graduate?

You will have done a full computer science degree. You can go one to do honours in Computer Science and then postgraduate studies in Computer Science and Computer Games at UCT or elsewhere.

### Is this an easy or frivolous option?

It is not, although it is fun! This is a technical course that gives a rigorous training in Computer Science with a specialization in Digital Gaming.

### What if my main interest is Computer Science?

The course adds a lot to a normal CS course, for example, more Software Engineering, Graphics, AI ...

## Contact Details of the Department

Contact the Department if you have more questions about the course.

### Physical Address:

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18 University Avenue  
Upper Campus  
University of Cape Town  
Rondebosch  
Cape Town  
South Africa

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