



**RHODES UNIVERSITY**

*Where leaders learn*

# **The Department of Computer Science**

Rhodes University has a history of high achievement and is committed to meeting the challenges of the present and future. It is an internationally accepted education centre of excellence, which recognises its southern African setting and the need to meet international standards in an open society. The University is dedicated to cultivating intellects in people who will courageously pursue the truth whatever the circumstances.

Please read this handbook. It is designed to make your life easier and facilitate the smooth running of the Department.  
We welcome your comments and suggestions.

Please refer to the online version of this handbook at  
<http://www.ru.ac.za/computerscience/undergraduate/departmentalhandbook/>  
for updated information about courses and related details.

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## Contacting the Department

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Email	compsci@ru.ac.za

# Welcome to the Department of Computer Science

Our era will be known in history as the age of Information & Communication Technology. In the Department of Computer Science, we are committed to preparing you for life in the Information Age.

Do you imagine yourself as a software developer, a project manager, a software engineer, network administrator, general ICT consultant, an entrepreneur in ICT sales and servicing, a systems analyst, the manager of an information systems department? Perhaps you are heading towards a teaching or academic career in ICT, a research oriented scientific occupation; or your aspirations might be for a career in commerce or finance, in the arts or social science, in pharmacy or medicine, in journalism or law. You may simply wish to be able to meet the growing challenges of information technology in your workplace. The inclusion of Computer Science in your degree will empower you to do all of this.

Information and Communication Technology is consistently changing our society by changing the way our economy, education system, social and cultural interaction works. This is particularly relevant to the kinds of activities graduates encounter in their day-to-day personal and professional lives. As technology progresses it will become increasingly important to have knowledge and understanding of the nature of technologies, and how they are changing. Anticipating these changes will enhance the choices you make in your personal and working life. Naturally, the more knowledge you have, the more you will be able to exploit the power of Information and Communication Technology.

We invite you to take advantage of being at one of the finest universities in Africa for studying the various aspects of Information and Communication Technology. A degree in Computer Science from Rhodes University is held in high esteem throughout the country and abroad.

The Department of Information Systems dovetails with and complements Computer Science at Rhodes University, and the two departments work closely together. The Computer Science Department offers a single semester course that prepares prospective Information Systems students for courses in their second year of study. Many students study Computer Science and Information Systems together as their major subjects, and this combined study of the two subjects can continue into postgraduate degrees. Whereas Computer Science concentrates on the technical aspects of software development and application, Information Systems addresses human, management and strategic aspects of Information Technology.

Computer Science is offered as a 3-year major course in the Faculties of Science, Commerce and Humanities.

Following the undergraduate degree, a fourth year Honours degree in Computer Science is offered. This course allows study in more specialised areas of computing, and introduces the concept of project work on a larger scale than is possible in undergraduate years. The fourth year of study also provides the minimum status needed for registration by professional bodies, and for international recognition (such as would be required to register as a graduate student at a foreign university).

The Department of Computer Science houses a strong postgraduate school which prepares MSc and PhD students. Work is particularly concentrated in the field of Distributed Multimedia, as Rhodes is sponsored as a Centre of Excellence in this area by Telkom SA and Coriant. The work of this centre incorporates Data Communications and Networks, Information Security, Image Processing, Audio Engineering, Parallel Computing, and ICT for Development. The Computer Science Department enjoys "grant receiving status", based solely on merit, from the National Research Foundation.

Our Department lays great importance on the teaching and learning processes in tertiary education, and is known for having some of the finest, most dedicated teachers in the country.

# Departmental Vision and Mission

Our vision is to be a leading African university, providing globally respected education and research in Computer Science.

Our mission is to be a leading force in shaping the development of Computer Science, through appropriate high quality research and consulting, and through the education of a spectrum of graduate professionals, competent to meet the future computing needs of their disciplines.

## **FOUNDATIONAL POLICIES:**

To achieve our mission and vision, we recognise that we must:

### **Curriculum:**

1. Produce graduates who will have acquired sound practical skills, and who also have a healthy understanding of the theoretical basis of the subject, and the need to base technology on solid scientific principles.
2. Provide specialised programmes that cater for the different needs and abilities of a widely heterogeneous audience, allowing for the possibility of various entry/exit points.
3. Develop a syllabus in which all the various components interface in a properly defined and cohesive manner.
4. Encourage a culture of renewal by reviewing the curriculum periodically.
5. Foster postgraduate research in areas of Computer Science that can be realistically pursued.

### **People:**

6. Encourage and reward excellence, and facilitate ongoing improvement of qualifications, standards of teaching and research, and publications.
7. Participate in the creation of computer-based systems relevant to industry and society at large.
8. Conduct research in areas that will enhance and promote the chosen emphases of the Department.
9. Foster a working environment in which interpersonal relationships between and amongst staff and students allow for the development of all parties as individual, innovative thinkers, but also as members of well-managed teams.
10. Attract a diverse body of engaged students of the highest possible calibre to the Department from all sectors of the local, national and international community.
11. Engender a sense of passion for our discipline amongst our students and staff.

### **Facilities:**

12. Provide the best possible facilities to promote research and teaching.

### **Publicity:**

13. Heighten the awareness of the unique possibilities afforded by the quality of our Department among learners, graduate students, prospective employers, and industry partners.

# Staff of the Department



**PROFESSOR  
ALFREDO TERZOLI**

**Head of Department  
Head of the Centre of Excellence**

E-mail: A.Terzoli@ru.ac.za  
Phone: 046-603-8602  
Room: 105

Professor Terzoli obtained a Laurea in Physics from the University of Pavia, Italy. He moved into computing soon afterwards, working for the private sector for a while. He was originally attracted to Rhodes University by the possibility to mix Computer Music and Artificial Intelligence, as well as to experience life in Africa.

Research interests: ICT for development, Convergence in telecommunication.



**PROFESSOR  
GEORGE WELLS**

**CS2 Course Co-ordinator**

E-mail: G.Wells@ru.ac.za  
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Room: 007

Professor Wells is a graduate of Rhodes University. He completed his PhD degree in Parallel and Distributed Computing at the University of Bristol.

Research interests: Distributed and parallel processing, data communications, multimedia applications, Java.



**PROFESSOR PHILIP  
MACHANICK**

**CS M&PhD Co-ordinator  
CS Tutor Co-ordinator**

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Professor Machanick obtained his PhD in Computer Science from the University of Cape Town in 1996, and holds MSc and Honours degrees from the University of the Witwatersrand and a University of Natal BSc, as well as a GCED from the University of Queensland, Australia. He has worked at various universities in South Africa, and at Stanford University and the University of Queensland overseas. He is editor of the South African Computer Journal, and campaigns for rational science policy in areas like health, environment and clean energy.

Research interests: Computer systems, bioinformatics.



**PROFESSOR  
BARRY IRWIN**

**Masters in Info Sec Co-ordinator**

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Room: 006

Professor Irwin is a PhD graduate of Computer Science from Rhodes University. He spent several years working in the network security and telecommunications field before returning to lecture at Rhodes. He heads up the Security and Networks Research Group within the Department.

Research interests: Network security technologies, passive security monitoring, data visualisation, information security awareness, information warfare and national cyberdefense.



**PROFESSOR KAREN  
BRADSHAW**

**Associate Professor**

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Room: 004

Professor Bradshaw obtained her PhD from Cambridge University through an 1851 Royal Exhibition Scholarship. She is also a Rhodes graduate with a Masters degree. Before returning to Rhodes, she lectured at the tertiary level within Southern Africa and has also worked in industry in both the UK and Zimbabwe.

Research interests: Distributed and parallel processing including GPGPU, robotics, computer simulation and modelling.



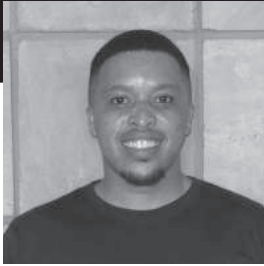
**MR JAMES CONNAN**

**CS1 Course Co-ordinator**

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Mr Connan holds an MSc. in Computer Science from Stellenbosch University and is currently working towards his PhD. He heads the Integration of Signed and Verbal Communication: South African Sign Language Recognition, Animation and Translation Group.

Research interests: Computer vision, machine learning, ubiquitous computing, integration of signed and verbal communication with particular application to South African Sign Language.



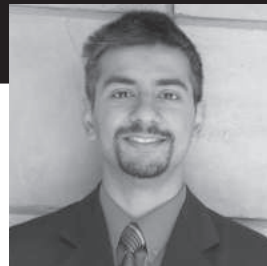
**DR MOSIUOA TSIETSI**

**CS Honours Course Co-ordinator**

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Room: 028

Dr Tsietsi is a graduate of Rhodes University with a PhD in Computer Science. He also served as a postdoctoral researcher in the Telkom Centre of Excellence. In addition to teaching at both undergraduate and postgraduate levels, he also supervises postgraduate research projects and heads the convergence group.

Research interests: Web real-time communications, software defined networking, network function virtualisation, quality learning in higher education.



**DR YUSUF MOTARA**

**CS3 Course Co-ordinator**

Email: Y.Motara@ru.ac.za  
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Room: 025

Dr Motara is a graduate of Rhodes University with a PhD in Computer Science. He lectures occasionally, but prefers to teach.

Research interests: Language design, computer science education, software development methodology, programming paradigms, information security.



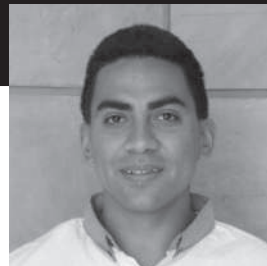
**MR ALAN HERBERT**

**Lecturer**

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Alan Herbert is a graduate of Rhodes University. He completed his Masters in large scale software network simulation at Rhodes University and has submitted his PhD for examination in distributed hardware accelerated network event analysis.

Research interests: Networks, network security, information security, application specific hardware development (both FPGA and MCU based), high performance clusters and mathematical application to big data.



**MR DANE BROWN**

**Lecturer**

Email: D.Brown@ru.ac.za  
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Dane Brown holds a Masters in Computer Science, from the University of the Western Cape, within the scope of parallel image processing using GPUs and specific to the application of South African Sign language recognition. He has submitted his Computer Science PhD for examination in the Multi-modal Biometrics field at Rhodes University.

Research interests: Computer vision, machine learning, biometrics, information security and GPGPU.



## PROFESSOR PAT TERRY

**Professor Emeritus**

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Room: 117

A Cambridge graduate, Professor Terry is internationally known as an author of Computer Science text books. He was the 1992 recipient of the Vice-Chancellor's Distinguished Teaching Award and was a member of the International Modula-2 standardisation committee. Professor Terry retired at the end of 2010, but has continued for some years to present the third-year translators course.

Research interests: Design of programming languages, standardisation and implementation.



## PROFESSOR RICHARD FOSS

**Associate Professor Emeritus**

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Room: 115

Professor Foss founded the Computer Music Unit at Rhodes University in 1987, and the Audio Networking Laboratory in 1994. He has published internationally in the fields of Computer Music and Audio Engineering. He is an active participant in the committees that define new Audio Networking and Surround Sound standards.

Research interests: Networking of audio and video devices for live concerts, sound installations and recording studios, surround sound and immersive sound.



## MR BILLY MORGAN

**Manager: ICT**

E-mail: B.Morgan@ru.ac.za  
Phone: 046-603-8291  
Room: 022

Mr Morgan has a background in electronics and worked in industry for a number of years before taking a position at Rhodes University. He is a graduate of Rhodes University in Computer Science and Information Systems.

Research interests: Using FOSS to develop ICT systems for schools that are reusable and reduce the administrative and resource load.



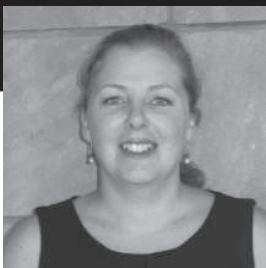
## MR CHRIS MORLEY

**Senior ICT Specialist**

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Room: 026

After working in industry in the UK for a number of years, Mr Morley completed his BSc(Honours) in Computer Science in 2003.

Research interests: Wireless and broadband technologies.



## MRS JILL JAPP

**Senior ICT Specialist**

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Mrs Japp obtained a BCom degree in Computer Science and Information Systems from UPE (now NMMU) in 2002. She started her career in IT support in Durban, working for a software development company. After relocating to PE as an IT Consultant for the SpecSavers group, she moved to Grahamstown to take up the position of Software Support Consultant in the IT Division at Rhodes University at the end of 2004. She joined the department in January 2007 as ICT Specialist.

Research interests: Computer forensics and security.



**MRS CARO WATKINS**

**Departmental Manager**

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Room: 011

Mrs Watkins is a Computer Science graduate of UCT and has worked in the IT industry for 19 years as a programmer and later as a project and support manager.




**MS MICHELLE COUPÉ**

**Office Administrator**

E-mail: M.Coupe@ru.ac.za  
Phone: 046-603-8244  
Room: Reception

Ms Coupé handles the finances for the department.




**MRS HEIDI MYBURGH**

**Departmental Secretary**

E-mail: H.Myburgh@ru.ac.za  
Phone: 046-603-8291  
Room: Reception

Mrs Myburgh handles the student marks and also shares responsibility for the secretarial functions in the department.



**MS RETHABILE MOLEFE**

**Receptionist / Secretary**


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Phone: 046-603-8247  
Room: Reception

Ms Molefe shares responsibility for the secretarial functions in the department.



**MS VIVIAN KILA**

**Service Staff**



**MR PHUMEZO DUKASHE**

**Service Staff**



## 2017 Prize Winners

At the Department's graduation celebration held in April 2017 the achievements of our top students during 2016 were recognised through the award of the following course prizes. Our congratulations go to these students for their outstanding performance in their various courses.

- Open Box Prize for Computer Science I: Thomas Makkink.
- Janinne Franke Prize for Computer Science II: Ella Wilby.
- SAP Africa Prize for Computer Science III: Megan Kingon.
- BSG Prize for Computer Science 303: Damon Hook.
- SAP Africa Prize for the Best Progress in Computer Science: Sibabalwe Peter.
- Open Box Prize for Computer Science Honours: Tomas Knoetze.
- Janinne Franke Prize for the Best Computer Science Honours Project: Tomas Knoetze.
- Centre of Excellence Prize for the Best Computer Science Research Student: Oluwasegun Sogunle.

# Departmental Dynamics

## COMMUNICATION WITH THE DEPARTMENT

One of the distinctive features of Rhodes University is the accessibility of the academic staff. We strive to run an open and approachable department, and encourage feedback on all aspects. We are eager to know about problems you might have that pertain to our courses. Please approach the appropriate people with your concerns. If you don't know who the appropriate person is, the departmental secretary is a good place to start.

In addition to academic support, Rhodes University has structures for dealing with crises that may be affecting your personal and academic lives. We encourage you to make use of the Student Advisor's office and the various counselling facilities that exist on campus. These facilities may also refer you to other divisions on campus that can help out with your particular needs.

## ADMINISTRATION

Our departmental secretaries are Ms Michelle Coupé, Mrs Heidi Myburgh and Ms Rethabile Molefe. Theirs are the friendly faces in the Hamilton Building reception. You should consult them about any general administrative matter (submitting leave of absence forms, collecting handouts, looking for lost property, and so on) during office hours.

## CLASS REPRESENTATIVES

During the first few weeks of the year, we ask each class to elect a class representative to liaise with the Department on issues of common concern to the class as a whole. We encourage you to communicate with your class representative, but this should not preclude individuals from approaching the staff of the Department directly.

## SUBJECT LECTURERS

Concerns about specific subject topics should be directed to the lecturer presenting that topic. They are present at practical sessions as well as lectures, and you should arrange an appointment with them at a convenient time if you need anything more than a quick reply. While we welcome your feedback, it should be remembered that courses cannot be tailored to individual preferences.

## TUTORIAL ASSISTANTS

All undergraduate classes have tutors who are senior students in the Department. They assist with laboratory sessions and tutorials. Please make use of these tutors during the times that they are available. Please respect their time outside of official tutorial and practical slots; the graduate tutors are also at Rhodes to work on their degrees, and when you see them sitting in the laboratory late at night, it means that they are under pressure of their own work, not waiting to help you with your uncooperative computer.

## COURSE CO-ORDINATORS

You should approach your course co-ordinator with any issue that you cannot take to your current lecturer, or that concerns the structure of the course as a whole.

Course co-ordinators for this year:	CSc1L	Mrs Valerie Moyo
	CSc112	Mrs Valerie Moyo
	CS1	Mr James Connan
	CS2	Prof George Wells
	CS3	Dr Yusuf Motara
	Honours	Dr Mos Tsietsi
	MSc & PhD	Prof Philip Machanick

## DEPARTMENTAL MANAGER

Mrs Caro Watkins is the Departmental Manager, and deals with student problems that cannot be solved by the secretaries.

## HEAD OF DEPARTMENT

The Head of the Department is your final recourse in the Department, and should generally be approached only when the other avenues have not solved your problem, or when referred by a lecturer. Please email him to make an appointment to see him.

## TECHNICAL PROBLEMS

Please report any technical problems to the secretaries. Please note that students are **not allowed** to attempt to repair any piece of hardware themselves. Even if you are technically very competent, this could lead to problems with our insurance company.

## COURSE ASSESSMENTS

In the Department of Computer Science, we regularly ask you to fill in course assessments, and your responses are taken seriously. Please fill in your course assessments as conscientiously as you can. They are extremely valuable in improving our courses and facilities.

## INTERNET DISCUSSION GROUPS AND MAILING LISTS

Forums are available to students to air their views. Staff members enter into these discussions from time to time, but the forum really belongs to you. Class mailing lists are used for staff to communicate with you.

## RESOURCES

**Textbooks:** Textbooks are available from Van Schaik Bookstore, and second hand copies can often be purchased from Van Schaik Bookstore or Fables bookshop.

**Library:** The University Library has an excellent holding of Computer Science textbooks.

**RUconnected:** The Departmental RUconnected pages have all relevant information regarding the courses, often including course notes and additional readings.

**ROSS:** Please ensure that you check these pages regularly and ensure that all discrepancies in marks are reported to the secretaries.

## LEAVE OF ABSENCE

Leave of absence will only be granted for health and tragic reasons, e.g. death in your immediate family, and almost never for occasions such as attending interviews, sporting functions, weddings, religious and cultural events or other social occasions. As preparation for entering the workplace as a professional, we expect you to make every reasonable effort to meet deadlines, and to observe professional standards for requesting time off for genuine illness.

### Tests

For the first-year courses (CSc1L, CSc112, CSc101 and CSc 102), if you are granted an LoA for a test, you will be required to write a make-up test or take an oral test (at the Department's discretion) close to the last day of lectures for the semester. The test will cover the entire semester's work. It is your responsibility to ensure that you know when and where the test will be held.

### Practicals

For the first-year courses (CSc1L, CSc112, CSc101 and CSc 102), if you are granted an LoA for a practical, you will need to ask your lecturer for an extension in writing in order to allow you to complete the practical in your own time. The extension is granted at the lecturer's discretion. Normally, a maximum extension of one week will be granted for this purpose.

## INTERVARSITY PROGRAMMING COMPETITIONS

The Department enters a number of teams into the Standard Bank IT Challenge and the ACM South Africa Programming Contest, held during the first and second semesters respectively. Both competitions have worthwhile prizes up for grabs. If you are interested in getting together a hot team of programmers for either or both of these competitions, contact Mr James Connan by emailing J.Connana@ru.ac.za in the first semester, or Prof Karen Bradshaw by emailing K.Bradshaw@ru.ac.za in the second semester.

Since 2014, the Department has also been involved in the cluster competition run by the Centre for High Performance Computing (CHPC). Students in their second year are eligible to enter this competition, which involves attending a week long Winter School on high performance computing (HPC) and then physically assembling a cluster of computers on which to run various HPC benchmarks. National winners are eligible to compete at the international HPC cluster competition. For more details, contact Prof Karen Bradshaw.

Reminders and details of the competitions will also be circulated a few weeks in advance of the actual dates.

## **BURSARIES**

Full details of the bursaries available to students at Rhodes can be obtained from the Financial Aid Office in the Eden Grove building. Several companies offer contractual bursaries to Computer Science students (these are the kind that you have to work back), and details of these will be posted up in the Department, as they become known.

## **MONITORING YOUR PROGRESS**

Practical marks are not a reliable indicator of what your final performance in the course is likely to be. A combination of your test mark and your practical mark (in the ratio of exam to semester mark weightings) is a more reliable indicator. These marks are almost always released on ROSS.

DP requirements exist to help ensure that you keep up with the course. Failure to meet these requirements can severely affect your chances of being permitted to write the exams. The onus is on you to ensure that you are meeting the requirements! Attitudes at university are rather different from those in many schools. If you show little interest, or skip classes, you may find that the staff show no sympathy when you fail. Since computer studies are not offered in all schools we have to start by accommodating many of the students who may have had little or no experience with a keyboard. Initially courses may seem "easy" to some, but it is unwise to develop bad habits because you think it is a "walk in the park". Our experience has shown that good Computer Science students come to lectures and keep up with their work. **BE WARNED** - the pace hots up and it is very easy to be left behind if you don't stay on top of the workload.

Did you know that if you work harder, you will pay lower tuition fees? Rhodes University offers tuition fee rebates for undergraduate students who achieve good marks. Similarly, Rhodes offers scholarships for postgraduate degrees based on previous academic achievement. Details are available from the Financial Aid office, or from the Division of Students Affairs.

## **SMOKING**

There is a no smoking policy in Rhodes University buildings. If you want to smoke, please do it outside of the building, at least 10 meters away from any entrance or window.

## **EATING AND DRINKING**

Eating and drinking is allowed in the labs, but the expectation is that it is done in a sensible and courteous manner to maintain hygiene standards. Drinks should be in a container, not open cups. Sweets or food in wrappers is acceptable, not hamburgers or fried chicken for example. The idea is that you should be able to enjoy some refreshment or a snack without transferring any residue to the keyboard or desk, or creating any odours that others may find unpleasant.

## **UNDERGRADUATE LABORATORIES**

The Jacaranda Laboratory will be the venue for service course practicals. The Jacaranda laboratory, along with the Union, the Eden Grove and Fountain labs, are general undergraduate laboratories, exclusively for the use of Rhodes students. As such they are YOUR LABORATORIES, and you need to take responsibility for keeping them tidy and pleasant to work in. Please report faults with the equipment to the IT division (e-mail: labs@ru.ac.za).

The Undergraduate Laboratories in the Hamilton Building are exclusively for the use of currently registered Computer Science 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> year students, as well as Information Systems 202 and third year students. We also accommodate other Computer Science and Information Systems courses where possible. Since it is your lab, you are entitled to ask anyone who is not a Computer Science or Information Systems student, or is doing something that is clearly not part of their Computer Science or Information Systems assignments to vacate a workstation so that you can make use of it. We will support you when you do this, so don't be shy.

The Hamilton labs will be closed for maintenance after the last CS/IS exam and for the long vacation, as well as occasionally during term time at the discretion of the technical section. Please report faults in the Hamilton labs to J.Japp@ru.ac.za.

## **LOST PROPERTY**

Lost property, e.g. disks, pencil cases, books, keys, clothes etc, that you pick up in the lab, should be handed in to the Hamilton reception. After a week, personal items will be sent to Campus Security.

## EQUIPMENT

The undergraduate and postgraduate labs in the Department of Computer Science house up-to-date personal computers and high-end research equipment. The Windows operating system has a broad range of installed software to support the teaching needs. Postgraduates get to choose and install their own operating system that is best suited to the work they do.

The high-end research equipment is specialized. For example, the audio networking research group has access to a range of modern mixing consoles, control stations, and high speed audio networking cards and equipment. Other groups and interest areas like Security, Mobile, GPGPU, Robotics, Image Processing, Networking, and our Telkom Centre of Excellence are also appropriately equipped for their respective work.

All computing facilities are networked, and all students are granted access to the Internet. Our networking facilities are excellent.

Computer facilities are granted to all users of the system for education purposes only, on the understanding that they will be used only by the person to whom they were granted. See the "Acceptable Use Policy" below. At the same time, we like to encourage those students who wish to get computer experience outside the narrow confines of the course exercises. As long as the staff are consulted in advance about extra-mural projects and they are academic rather than commercial, permission is likely to be granted.

Students should ensure that their work is backed up regularly. Having your own external hard drive or USB stick will come in handy.

## PRINTING

Laser printing is available on all floors in the Hamilton Building, and in the general labs. Students need to transfer funds via ROSS, and MUST specify which labs they will be printing in. Please remember that computer paper costs money and has an impact on the environment; try to keep paper wastage down.

## ACCEPTABLE USE POLICY (AUP) FOR RHODES UNIVERSITY COMPUTER EQUIPMENT

To obtain permission to use the general computing facilities, you need to agree to adhere to the following conditions:

- Only staff and students of the University are allowed to use the computing facilities. No one else may be present in the laboratories without permission.
- You may not allow another person to use your facilities, or make use of facilities allocated to another person (i.e. don't log in using someone else's login credentials).
- Equipment is to be used responsibly. Don't meddle with parts of the computing systems to which you do not have the right of access. Do not attempt to bypass security mechanisms put in place by the IT Division of the University.
- The software and manuals made available for your use are the property of Rhodes University. You may not make copies of them, or remove them from the premises, without written permission.
- You are required to observe instructions that are issued specifying ways in which the facilities shall be used.
- Anyone who violates these conditions will be subject to disciplinary action.
- Rhodes University accepts no responsibility for the integrity of computing facilities. You should keep your own backups of valuable work.
- These conditions of use may be varied from time to time at the discretion of the IT Director.
- Permission to use the computing facilities will normally be granted for one calendar year at a time.

This is a simplified version of the acceptable use policy - the full version is more wordy, and can be found at <http://www.ru.ac.za/aup/>. Before you are allowed to make use of computing facilities, you have to agree to adhere to the full version, and to cooperate fully with any inquiry into your use of Rhodes's facilities.

## ADDITIONAL NOTES REGARDING THE USE OF HAMILTON BUILDING INFRASTRUCTURE

- All of the standard Rhodes University AUP rules apply to the facilities in the Hamilton Building.
- The Hamilton Building infrastructure exists in part to support your courses in the Department of Computer Science. You are encouraged to make use of the facilities to store your coursework, but you are advised not to store personal or private data or email on the systems or servers as the administrative policy is one where the Systems Administrators have complete access to everything. We routinely inspect data stores for contraband files and may need to inspect user profiles if diagnosing problems.
- While we take reasonable measures to ensure the integrity and safety of the data stored on our servers, we do not make any guarantees about this. Keep your own backups of data that you cannot afford to lose.

A more detailed series of notes regarding the infrastructure, services and facilities available in the Hamilton Building may be found at <http://www.ict.ru.ac.za/>. This resource will be updated from time to time, so it is worth reviewing occasionally.

### PUBLIC HOLIDAYS

To keep all practicals in step with lectures for each week, practicals that fall on a public holiday will be held on an alternative weekday from 7pm -10pm as follows:

If a public holiday falls on a	The practical will be rescheduled on
Monday Tuesday Wednesday Thursday Friday	Following Tuesday night Following Wednesday night Following Thursday night Previous Tuesday night Previous Wednesday night



# Plagiarism Policy

Students are referred to the University's Policy on Plagiarism, which gives full details of the processes to be followed in cases of plagiarism. This document serves to give specific details of the Department's implementation of this policy, and is subject to the provisions of the University policy and any changes that may be made to it.

(See <http://www.ru.ac.za/media/rhodesuniversity/content/institutionalplanning/documents/Plagiarism.pdf>)

## DEFINITION OF PLAGIARISM

The University defines plagiarism quite simply as "Taking and using the ideas, writings, works or inventions of another as if they were one's own". In Computer Science, "ideas, writings, works or inventions" includes computer programs, or parts of computer programs. One of the most common instances of plagiarism encountered in Computer Science is the unacknowledged submission of part or all of another person's work as one's own work for practical assignments. This, or any other instance of plagiarism (e.g. unacknowledged referencing or direct quotation), is taken very seriously by the Department and by the University.

**UNLESS EXPLICITLY PERMITTED TO DO SO BY THE RELEVANT LECTURER, STUDENTS SHOULD NEVER SUBMIT ANYTHING THAT IS NOT THEIR OWN WORK FOR ANY ASSIGNMENT. IF A STUDENT IS IN ANY DOUBT AS TO THE LEGALITY OF THE USE OF ANY MATERIALS OR ASSISTANCE RECEIVED FOR AN ASSIGNMENT THEY SHOULD CONSULT THE LECTURER FOR CLARIFICATION.**

## DISCIPLINARY PROCEDURES

All cases of plagiarism are subject to disciplinary procedures as laid down in the University's Plagiarism Policy, and are handled by the Department's Plagiarism Committee.

### Plagiarism Committee

The Plagiarism Committee consists of the Head of the Department, the Department Manager and the lecturer responsible for the assignment in which the plagiarism occurred. If the Head of the Department is the lecturer concerned, then the third member of the Committee shall be a senior member of the academic staff.

### Penalties

The Plagiarism Committee shall consider the case and make a decision on the severity of the offence and, where appropriate, the penalty to be applied. The usual scale of penalties is as follows:

- First, minor offence: a mark of zero will be awarded for the entire assignment for all students involved.
- Second offence, or major offence: loss of the DP certificate for the course.
- Offences older than two years will not be held against you.

### Appeals

A student may appeal the findings of the Plagiarism Committee or the penalty imposed to the Head of Department. The HoD in consultation with the Plagiarism Committee will consider the appeal and make a final decision.

NOTE: A possible reason for appeal is for a student whose work has been used to submit proof that their involvement in the plagiarism incident was without their knowledge or active participation. In such cases the marks for the assignment will usually be reinstated, or the withdrawal of the DP certificate reversed. **Appeals for partial marks to be awarded for the assignment will not be considered.**

### Final Appeal

The final decision of the Departmental Plagiarism Committee may be appealed to the University's Senate Standing Committee on Plagiarism. However, students should note that very serious penalties may be applied by the Senate Committee, and that this is not a step to be taken lightly.

### Reporting

Students should also note that all cases of plagiarism are recorded and are reported to the Senate Standing Committee on Plagiarism periodically. Should your DP be removed, it will be indicated on your academic record.

## DP Regulations

The University has a system whereby students who perform badly, or who do not meet minimum attendance standards, are not granted a “DP Certificate” (“DP” stands for Duly Performed). Without the “award” of such a certificate – they do not actually exist in paper form – a student is not permitted to write the final and crucial qualifying examination in the particular subject. You are expected to attend all class lectures, tutorials, and practical sessions. The requirement that you submit all assignments and tests is strictly enforced. In particular, each practical assignment must be completed and submitted on or before the due date specified for that assignment. Usually you are given about a week to complete each exercise, and even if you are ill at the time of a practical class you will normally be expected to make up the work in your own time.

### DP REGULATIONS FOR CSC111, CSC112, CSC101 & CSC102 ONLY

The nature of the CSc111, CSc112, CSc101 and CSc102 semester courses require that a different set of DP regulations be applied.

- For your **CSc111** DP to be granted, you are required to maintain an average of at least 50% for your practicals, and achieve an average of at least 40% for your tests.
- For your **CSc112, CSc101 and CSc102** DP to be granted, you are required to maintain an average of at least 40% for your practicals and achieve an average of at least 40% for your tests.
- No extensions will be granted for tests, but you may be eligible to write the make-up test at the end of the semester if you have been granted a leave of absence.
- Extensions for practicals will only be granted when a leave of absence is granted.
- Practical assignments and tests missed without leave of absence will gain you a mark of 0 (zero). It is in your best interest to ensure that you hand in all practical assignments and write all tests, otherwise, you will endanger your chances of achieving the minimum requirements as stated above. You are encouraged to keep your test and practical marks as high as possible so that you don't endanger your chances of achieving the minimum requirements.

Besides the “official” tests as scheduled in this handbook, lecturers are free to set other tests at very short notice. These also fall within the rules laid out here.

If you intend to continue with Computer Science you are required to read and understand the following DP regulations that apply to the other courses.

### DP REGULATIONS FOR SENIOR UNDERGRAD COMPUTER SCIENCE COURSES

When circumstances dictate (for example in the case of extended illness), an extension of up to three days may be allowed. Only in exceptional circumstances will extensions beyond that time be allowed and assignments will never be accepted after model solutions have been released.

- If you have achieved an average of less than 30% for tests by the end of the semester, your DP will be refused.
- Unless you maintain an average of at least 40% for practicals, your DP will be refused.
- The student bears the onus of proof for disputes around practical hand-ins.
- Evidence of any concessions must be in writing and signed by a staff member of the Computer Science Department.

Besides the “official” tests as scheduled in this handbook, lecturers are free to set other tests at very short notice. These also fall within the rules laid out here.

It is your responsibility to make sure that you have signed any class attendance registers that are circulated. Students caught signing the class register on behalf of others will face disciplinary action.



## DP SUMMARY

The Department is under no obligation to issue friendly warnings to students who do not meet the requirements outlined above. If you fail to perform duly you will not be awarded your DP. After that any appeals must be made in writing, and are unlikely to succeed.

With respect to work that is not submitted, the following will apply separately in each semester.

With leave of absence: first-year courses		Credit	Penalty
Practicals	for the first two not handed in on time	You must submit the assignment within any extended time allowed you for credit to be granted, otherwise a mark of zero will be awarded.	No DP penalty
	for the third and subsequent ones not handed in on time	You will be awarded a mark of zero	DP normally refused
Tests or Tutorials	for the first two missed	You must write the make-up test at the end of the semester.	No DP penalty
	for the third and subsequent ones missed	You will be awarded a mark of zero	DP normally refused
With leave of absence: senior courses		Credit	Penalty
Practicals	for the first one not handed in on time	You will get your prac average for the particular section.	No DP penalty
	for the second one not handed in on time	You must submit the assignment within any extended time allowed you for credit to be granted, otherwise a mark of zero will be awarded.	
	for the third and subsequent ones not handed in on time	You will be awarded a mark of zero	DP normally refused
Tests or Tutorials	for the first one missed	You will get your test average for the semester.	No DP penalty
	for the second one missed	You may be required to take an oral or other make-up test or else obtain a mark of zero.	
	for the third and subsequent ones missed	You will be awarded a mark of zero	DP normally refused
With no leave of absence: all courses		Credit	Penalty
Practicals	for the first two not handed in on time	You will be awarded a mark of zero	
	when the next one is not handed in		DP refused
Tests or Tutorials	for the first one missed	You will be awarded a mark of zero. No chance will be normally given to "catch up".	
	when the next one is missed		DP refused

If practicals and tests have been excused through leave of absence, these also count against the maximum that may be missed altogether. Thus if you miss two assignments through illness you are not granted permission to miss another three without leave of absence.

## **DP WITHDRAWALS, EXTENDED DPs, AEGROTATS, LEAVE OF ABSENCE.**

The Computer Science Department has separated three roles:

- **Legislature:** We make our rules in keeping with University policies. We don't amend them on the fly. They protect our courses and our students. They are in this handbook. They are not attendance-based, but are based on performance. They are particularly lenient with low subminima – this guards against you having one or two "bad days". If you don't make one of our DP subminima, even on a close miss, you are nowhere near having performed adequately. Do the course again.
- **Judiciary:** Did we apply the rules correctly in accordance with the facts of the case? We will rectify any errors we may have made.
- **Clemency & Appeals:** We don't do this! We accept the need for appeals, but these need to go to the higher authorities who take a global view of your overall situation, be it academic or personal. The Dean of your faculty is the appropriate person to look at your overall academic performance and your plans to obtain your degree, and can make a recommendation to our Department. Similarly, the Division of Students Affairs' office has qualified people who can assess your personal circumstances and make recommendations to our Department.

Submit any appeals in writing to the appropriate Dean within two weeks of the event. The Dean will make a recommendation to the Head of Computer Science.

Please do not corner us with long tales of woe about your bursaries, the exchange rate, your parents' expectations, your illness, your involvement in student disciplinary hearings, your workload, your hangovers, your difficulty with the lecturer in subject X, your boyfriend's depression, and a host of other stories. We want to be helpful, but we are not qualified to make these judgements. Put them in writing to your Dean.

### **EXTENDED DPs**

In exceptional circumstances, the Department may grant an extended DP. An extended DP allows a student to repeat the course without having to fulfill the coursework requirements. The coursework mark for the previous registration of the course will be carried forward.

To be granted an extended DP a student's class mark must be greater than 60% and exam mark must be greater than 40%. If the semester was passed and the student wishes to upgrade the mark, then the 60% class mark condition may be waived.

### **PRACTICAL SUBMISSION RULES**

The following rules will apply to any practicals submitted during the year:

- CSc112 & CSc1L practicals assigned during a practical session must be completed and handed in at the end of the practical session (unless the lecturer in charge specifically indicates otherwise).
- For CS1 and senior courses, a practical assigned during a practical session must be completed by the next practical session (unless the lecturer in charge specifically indicates otherwise).
- Practical must be submitted via RUconnected, or as required by the lecturer.
- Your assigned tutor must sign the relevant documentation to indicate receipt of your practical.
- No late practicals will be accepted unless you have a leave of absence in which case you must hand in the practical by any extended deadline that has been set.
- Unless submitted via RUConnected, the correct, fully completed cover sheet must accompany each practical submitted. Otherwise, the practical will not be accepted (you will receive a mark of zero).
- You will only be given permission to change practical days under extreme circumstances. If this is on a temporary basis, it is your responsibility to ensure your practical is still submitted during the practical session to which you are normally assigned.
- Marked practicals will be handed back during the following practical session after the session in which the practical was handed in. Please complain to the lecturer in charge if this does not occur.
- You must sign the relevant documentation to indicate receipt of your marked practical.
- Teamwork in practicals can only take place with the explicit approval of the lecturer concerned. Team composition must be ratified in writing with the lecturers concerned.