



NOTES

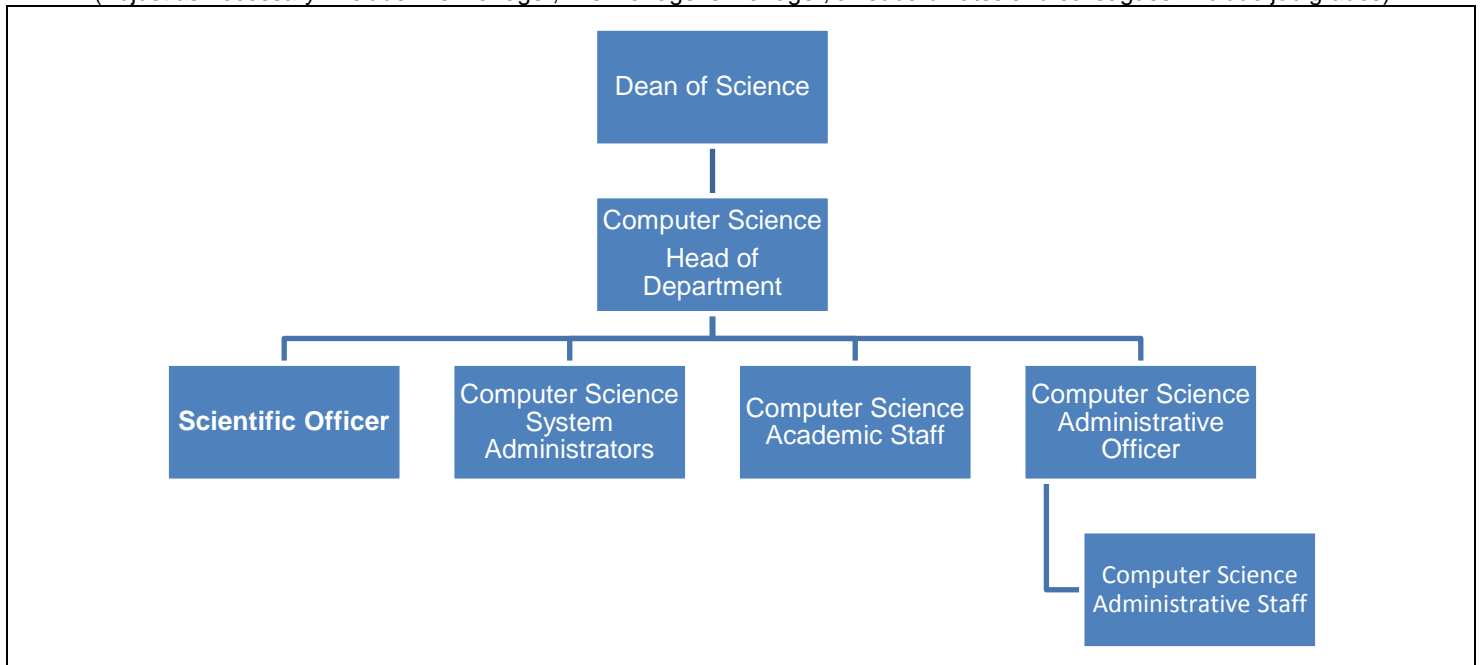
- Forms must be downloaded from the UCT website: <http://www.uct.ac.za/depts/sapweb/forms/forms.htm>
- This form serves as a template for the writing of job descriptions.
- A copy of this form is kept by the line manager and the job holder.

POSITION DETAILS

Position title	Scientific Officer
Job title (HR Practitioner to provide)	
Job grade (if known)	PC 9
Academic faculty / PASS department	Science Faculty
Academic department / PASS unit	Computer Science Department
Division / section	
Date of compilation	11 / 11 / 2013

ORGANOGRAM

(Adjust as necessary. Include line manager, line manager's manager, all subordinates and colleagues. Include job grades)



PURPOSE

Computer Science practicals are a critical part of Computer Science qualifications, as a result of which every course has a practical sub-minimum requirement in order to pass the course. The main purpose of this position is to support our academic staff and students with practicals and practical assessments. The Scientific Officer will work closely with the academic staff in ensuring that Computer Science students gain the necessary practical experience expected of computing graduates.

JOB CONTENT

Key performance areas (4 – 6) (What)	% of time spent	Activities / Objectives / Tasks (How)	Results / Outcomes (Why)	Competencies needed
1 Preparation of Practicals	70%	<ul style="list-style-type: none"> • Implementation of software components required for practicals • Creation of test data sets, databases, etc. required by practicals • Programming model solutions • Configuring and preparing the departmental Automarker system for practicals where appropriate 	<ul style="list-style-type: none"> • Practicals unambiguously specified, feasibility confirmed and model solution implemented • Software components and test data or databases created to save staff and student time and ensure consistency of assessment • Automarker able to be used correctly and effectively to give students immediate feedback on incorrect submissions 	<ul style="list-style-type: none"> • Post-graduate degree in Computer Science • Ability to program in variety of computing paradigms and ability to learn new ones • Ability to work with different operating systems and computer systems • Sufficiently assertive and with good communication skills as required to liaise with academic staff • Ability to prioritise conflicting demands and negotiate solutions, and to take initiative in planning ahead and ensuring systems are ready and working on time
2 Documenting systems	5%	<ul style="list-style-type: none"> • Documenting departmental systems • Documenting problems with practicals and their resolution • Reviewing and updating practical manuals e.g. report writing, makefile usage, etc. 	<ul style="list-style-type: none"> • Staff and students have documentation of systems and how they must be used • Staff and students have documentation of technical solutions to problems for use when problem recurs 	<ul style="list-style-type: none"> • Post-graduate degree in Computer Science • Ability to program in variety of computing paradigms and ability to learn new ones • Ability to work with different operating systems and computer systems • Ability to prioritise conflicting demands
3 Undergraduate Support	20%	<ul style="list-style-type: none"> • Troubleshooting problems during practicals • Assisting with computer lab tutorials • Detecting and monitoring practical problems and reporting to staff • Answering student queries on practical specifications • Tutor and teaching assistant training and management • Scheduling and co-ordination of laboratory use. 	<ul style="list-style-type: none"> • Additional assistance available for students during laboratory tutorials and practicals, thus decreasing the number of students per assistant • Staff timeously informed of any problems with practicals 	<ul style="list-style-type: none"> • Post-graduate degree in Computer Science • Ability to program in variety of computing paradigms and ability to learn new ones • Ability to work with different operating systems and computer systems • Good communication skills

4	Practical Assessment Assistance	5%	<ul style="list-style-type: none">• Configuring and executing plagiarism detection tools and reporting to staff	<ul style="list-style-type: none">• Early and frequent detection of plagiarized code to eliminate copying	<ul style="list-style-type: none">• Post-graduate degree in Computer Science• Ability to program in variety of computing paradigms and ability to learn new ones• Ability to work with different operating systems and computer systems• Ability to prioritise conflicting demands and negotiate solutions, and to take initiative in planning ahead and ensuring systems are ready and working on time
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MINIMUM REQUIREMENTS

Minimum qualifications	Post-graduate degree in Computer Science
Minimum experience (type and years)	At least 2 years post-Honours experience in the computing field.